A CROSS-LINGUISTIC STUDY OF THE LEXIS OF LOCOMOTION IN LEARNERS OF SECOND LANGUAGE ENGLISH

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DECLARATION

I hereby declare that this thesis was composed by me and is entirely my own work.

ABSTRACT

The lexical development of second language learners can be seen to involve them in a process of recategorization. This is also a lifelong, though progressively attenuated, feature in the first language. For the second language learner, however, the process is complicated by the possibility of lexico-semantic interaction between the first and later languages learned.

The lexical focus of the study is on the semantic domain of locomotion, which is seen in cognitive semantic terms as a realization of the Source-Path-Goal schema. Talmy's typology of motion events provides the linguistic framework for the research programme. According to this typology, languages will tend to have a characteristic verb lexicalization pattern in which motion is conflated with either a Path or a Manner component.

The language-learning context is one of learners of English as a second language in a multilingual African country - Kenya. The subjects in the study were drawn from three different first language communities — Luo, Nandi and Lunyore — the first two being Nilotic languages and the third a Bantu language. There were also two levels of L2 proficiency - intermediate and advanced.

Four tasks were used to investigate the mental lexicon of the subjects in order to clarify the role of the L1 in lexical organization and use. Two tasks, involving story retelling and sentence completion, considered productive lexical usage and two, using sentence judging and card sorting, looked at receptive usage. Individual verb use was examined as well as Talmy's typology.

The results support the view that the mother tongue does influence L2 vocabulary use, both receptive and productive, in quite subtle ways, such as lexicalization patterns, frequency of use of particular verbs, the understanding and acceptance of certain verbs. The influence will vary according to the nature of the task and between individuals. It also tends to decline with greater proficiency, although an established local variety of the L2 is likely to reinforce certain features.

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INTRODUCTION

> 'When *I* use a word,' Humpty Dumpty said in rather a scornful tone, 'it means just what I choose it to mean—neither more nor less.'
>
> 'The question is,' said Alice, 'whether you *can* make words mean different things.'
>
> 'The question is,' said Humpty Dumpty, 'which is to be master—that's all.'
>
> Alice was too much puzzled to say anything; so after a minute Humpty Dumpty began again. 'They've a temper, some of them—particularly verbs: they're the proudest—adjectives you can do anything with, but not verbs—however, *I* can manage the whole lot of them!'

Taking our cue from Humpty Dumpty, we may appropriately begin this study of the learning of lexical verbs in one semantic domain with a consideration of terminology.

Without going into the complex issue of what constitutes a word, the latter will, for the purposes of the present work, be generally taken in the sense of **lexeme**, i.e. a basic, contrasting unit of vocabulary which forms a separate entry (or sub-entry) in a dictionary.

It is conventional for linguists to speak of 'lexis' and language teachers of 'vocabulary'. Although these terms are cognitive synonyms (Cruse 1986), they each have their own nuances, reflecting the respective theoretical and pedagogical concerns of their users. For the most part we shall use the term 'lexis', with 'vocabulary' occasionally brought in for variety or where it seems more appropriate.

Lexis/vocabulary has never disappeared entirely from the attention of language specialists, whether linguists or teachers. Indeed, it is difficult to see how it could. But these specialists have at times regarded it as somewhat peripheral to language study. This is what seems to have occurred for much of the period between 1950 and 1980. But with the changing tides of intellectual fashion lexis/vocabulary is back in favour again and it is no longer possible to speak of its neglect, as Levenston (1979) and Meara (1980) did only a decade or so ago. There has been a spate of lexically-oriented research[1], accompanied by a boom in the publishing of vocabulary-related educational material (in the

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[1]See the following collections: Carter (1987), Gass (1987), Carter & McCarthy (1988), Nation & Carter (1989), Arnaud & Béjoint (1992); also the survey by Gass (1988) and annotated bibliographies by Meara (1983, 1987).

form of textbooks for students and methodology guides for teachers),[2] even during the period of gestation of the present work. At the same time, with semantics once more centre stage in theoretical work (see Chapter Two), the connections and interrelations of lexis and syntax are being stressed more frequently. Nevertheless, despite all the apparent activity in vocabulary studies, there is much that remains unclear.

As for language learners themselves, it is probable that the majority have never been in any doubt about the importance of vocabulary. Indeed, it can be claimed that its importance actually increases with growing mastery of a language, so that for the advanced learner it is (or remains) 'problem number one' (Marton 1977). A better understanding of how lexis operates in second language learning may therefore help teachers meet their students' needs more effectively.

0.1 Scope and focus of the work

Learning a new language, in Corder's view,

> is emphatically not a question of acquiring a new set of names for the same things; it is not just the learning of an automatic translation device, the internalizing of a bilingual dictionary. On the other hand, learning a language does not involve learning a new 'world view'. (Corder 1973: 77)

But even if we reject, as Corder does, the strong version of the Sapir-Whorf hypothesis, there is still going to be a certain amount of semantic **recategorization** in second language learning. The actual degree of recategorization will depend on the closeness of the two languages involved, but it will clearly affect lexical usage. The present work investigates this cross-linguistic lexico-semantic interaction in a learning context involving first languages completely unrelated to the target language.

The context in question is one of intermediate and advanced learners of English as a second (or, more precisely, a third) language in a multilingual African country — Kenya. The subjects came from three different mother tongue backgrounds: Luo, Nandi and Lunyore. The first two languages are distantly related as members of the Nilotic family, but the third, a Bantu language, is quite separate (see Chapter Four). The researcher had taught at

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[2]For example, Celce-Murcia & Rosensweig (1979), Rudzka *et al.* (1981, 1985), Allen (1983), Gairns & Redman (1986), Morgan & Rinvolucri (1986), McCarthy (1990), Nation (1990).

secondary schools in Kenya for a number of years and was therefore familiar with the learning environment and, to varying degrees, with the three languages.

Instead of trying to sample the learners' vocabulary as a whole, the decision was made to focus on one area — the semantic domain of locomotion — which could then be investigated more intensively. The choice of this domain will be explained and justified more fully in Chapter Three, but the main advantages are its universal character and the fact that it has received considerable attention from linguists. By the lexis of locomotion, I shall mean expressions typically denoting self-agentive change of location by human beings.

The guiding assumptions throughout are that language learning is a cognitive activity which cannot be divorced from other cognitive processes and that learning a second language is not *fundamentally* different from first language learning, though it will be affected by maturational as well as socio-cultural factors. These assumptions will be clarified in the first two chapters.

0.2 Research Questions

According to Carter and McCarthy (1988: 12), the basic question underlying most second language (L2) lexical research is that formulated by Meara:

> What does a learner's mental lexicon look like and how is it different from the mental lexicon of a monolingual native speaker? (Meara 1982: 29)

The mental lexicon of the learner, in both productive and receptive use, is without doubt a key concept in the present work and will be explored in more detail in Chapter One. We shall be concerned with the extent to which the learner's L2 lexicon of locomotion is influenced by that of his first language (L1). In Chapter Three we shall see how languages use different lexicalization patterns to express locomotion. This suggests the first specific question to investigate:

(i) Does the learner's L1 influence his choice of particular lexicalization patterns for locomotion in his L2 production?

In Chapter Three we shall also consider the range of individual lexical items available in English for the field of locomotion. This leads to a second question:

(ii) Does the learner's L1 affect the amount of use he makes of particular L2 lexical items in the domain of locomotion?

The questions so far have been concerned with language production. It will also be helpful to look at how learners are affected receptively, specifically in their acceptability judgements and their perception of lexical relationships. This gives us two more questions:

(iii) Does the learner's L1 influence his judgement of the semantic acceptability of L2 locomotion verbs in context?

(iv) Does the learner's L1 affect the way he sees the relationships between individual L2 locomotion verbs?

A rather more general question would be to ask

(v) Is there a difference in the extent of L1 influence between learners at different proficiency levels?

One would expect to see a decline in L1 influence as learners achieve greater proficiency in the second language. Ideally this question would be added as a rider to each of the earlier questions but, as will be explained in Chapter Five, it had to be restricted to the first two only.

0.3 Plan of the work

As the title of this work implies, there are three main aspects to it. First, it is a *cross-linguistic* study, involving three Kenyan languages and English; this brings in the question of cross-linguistic influence or transfer. Second, it deals with the *lexis of locomotion*—a specific area of vocabulary; this raises the issue of the lexicon, in both psycholinguistic and linguistic terms. Third, it concerns *second language learners of English*: this relates to second language acquisition and the sociolinguistics of English as a second language in a specific environment. Part One of this work will therefore set the scene by looking at previous work that has been done on the lexicon, both in general and in relation to the chosen semantic domain of locomotion. Part Two will describe the research context of Kenyan learners of English with different first languages and explain the research design used to investigate their lexical usage. Finally, Part Three will present and discuss the research findings.

Part One consists of three chapters. In the first two chapters we take a general view of the lexicon. Chapter One, **Lexis in First and Second Languages**, will begin with an examination of the concept of the mental lexicon and what psychologists have discovered about it and the process of

lexical acquisition. The particular question of second language acquisition will next be considered, leading to a discussion of lexical transfer. The second chapter, **Linguistic Approaches to the Lexicon**, will offer a general view of the handling of the lexicon by linguists before going on to examine in more detail two contrasting viewpoints. First, the structural linguistic tradition as seen in field theory and componential analysis is reviewed and then the more recent development of cognitive semantics is presented and evaluated.

In Chapter Three, **The Semantic Sub-domain of Locomotion**, we turn our attention to the specific area of vocabulary under consideration. This will be dealt with in some depth through a review of the various linguistic treatments of spatial relations and motion events. Emphasis will be placed on cognitive views and in particular those of Talmy. The English lexicon of locomotion will then be discussed in detail.

Part Two consists of two chapters. In Chapter Four, **The Fieldwork Context**, we shall look briefly at the sociolinguistic background of the country where the fieldwork for the study was carried out — Kenya. The three Kenyan languages whose speakers were the subjects of the study will then be introduced and the lexicalization of locomotion in each of them will be discussed.

This leads on naturally to Chapter Five, **The Research Design**, where the experimental hypotheses and the construction of the research instruments (including piloting) will be presented and discussed.

Part Three contains three chapters. In Chapter Six we will examine the data from the two tasks providing production data and in Chapter Seven we will do the same with the two tasks providing reception data.

Finally, in Chapter Eight, **Interpreting the Results**, we discuss the various findings and relate them to the research framework, drawing appropriate conclusions and making suggestions for future research.

Part I

Background to the Research

CHAPTER ONE

LEXIS IN FIRST AND SECOND LANGUAGES

The theme of this study, as described in the Introduction, is the role of the first language in second language lexical organization and use. Since this involves the concept of a mental lexicon, it is appropriate that, before looking at lexis from a theoretical linguistics perspective (Chapter Two), we should consider the psycholinguistic work that has been done on the mental lexicon (Section 1.1) and the process of lexical acquisition in a first language (Section 1.2). A particularly appropriate model of language production will be described in detail so that the problems of describing the lexicon and access to it are set in the appropriate context. In looking at first language lexical acquisition we shall find that, while much work has been done on the early stages, very little attention has been given to the later stages which may be more relevant from the point of view of second language learning. We shall then turn to this topic of lexis in a second language (Section 1.3), which here means any language learned after the first or which is not a bilingual's primary language. Lexical issues will be treated under the three categories of Learning, Organization and Use. This leads to the final section (1.4), a discussion of cross-linguistic influence — both in general and in relation to lexis in particular. We shall see that a considerable amount of work has been done on the finer details of this influence, but that, as with second language lexical studies generally, very little theorizing has been attempted.

1.1 The mental lexicon

If we are to conduct a meaningful investigation of cross-linguistic investigation of second language lexico-semantic interaction, it is important to try to be as clear as we can about the psychological processes involved. Psycholinguists generally refer to the store of words which a language user can draw upon, either productively or receptively, as his mental lexicon, but they characterize this in a variety of ways, depending on their theoretical predilections. For example, on one view, the lexicon is "a repository of declarative knowledge about the words of [a speaker's] language" (Levelt 1989: 182) while on another it is "a set of subroutines that can be called when

different words are used" (Miller and Johnson-Laird 1976: 166). Before we consider possible models, however, we need to look at how information about the workings of this internal lexical knowledge is obtained.

Evidence about the operation of the mental lexicon basically comes, as for other aspects of the language system, from two main data sources: naturalistic and experimental. Naturalistic data includes performance errors (slips of the tongue etc.) and observations of word searches. It can come from normal speakers or from linguistically impaired speakers, e.g. aphasics of different kinds. Experimental data goes back at least as far as Galton's nineteenth century investigations of word associations and includes a range of techniques developed in this century, such as lexical decision tasks, priming and phoneme monitoring. While both types of data have something to contribute, it is, according to Garman (1990: 113), naturalistic data which is becoming increasingly central to psycholinguistic research. A detailed picture is now beginning to emerge of how the mental lexicon works, although a good deal remains speculative (for a survey see Aitchison 1987).

It seems to be confirmed by contrastive studies of aphasias that a broad distinction can be made between lexicon and syntax in neural processes (rather than as being located in specific areas of the brain) (Saffran, Schwartz and Marin 1980; Scholes 1977). However, we are reminded by Marin (a neurobiologist) that

> whereas linguistic description is primarily a theoretical and logical description of an almost idealized system of representation, rules of relations and combinations, the organism and its brain are neither theoretical nor logical, but are overwhelmingly practical, self-centered, compelled by continuous internal urges, and not always parsimonious or precise. (Marin 1982: 62)

It is, in Marin's view, unfortunate that the bias of linguistic theory—he is clearly thinking of the Chomskyan paradigm—has led to an excessive concern with the problems involved in acquiring syntactic rules but not much interest in

> the much greater demands on memory that are imposed by the learning of an enormous, arbitrary lexicon, full of orthographic, phonological and phonetic exceptions. (ibid.)

There are, though, signs of a change in emphasis in recent years (e.g. Bresnan 1982; Hudson 1984), so that it is now possible to envisage a type of theory in which "syntax gradually emerges from the properties of that lexical organization, rather than emerging as a totally separate set of rules to be learned as independent cognitive operations" (Marin 1982: 66).

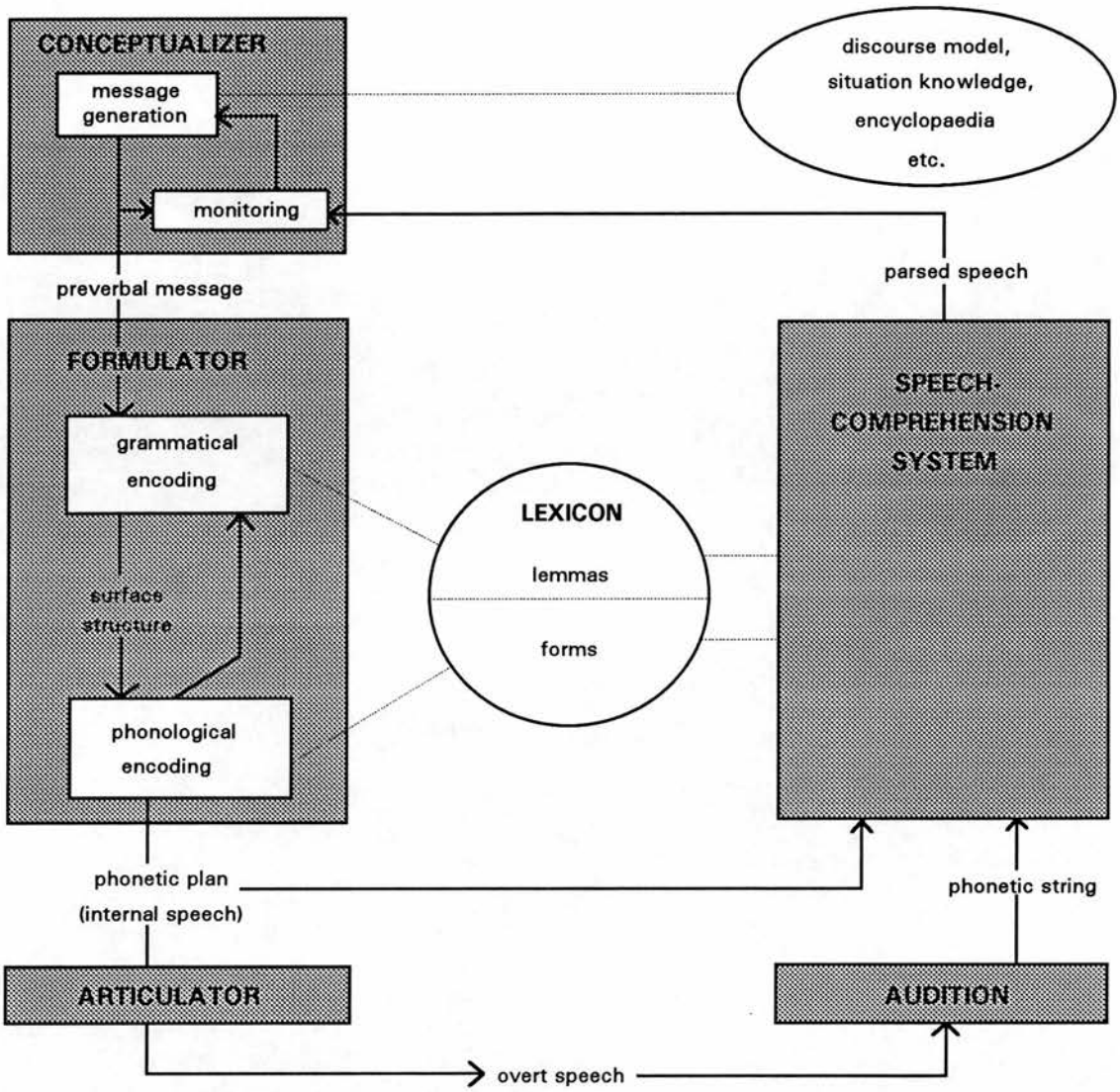

Figure 1.1: A model for speech production (Levelt 1989)

Such a theory can be found in Levelt's lexical hypothesis, which is a key assumption in his account of language production (Levelt 1989). According to this hypothesis, grammatical encoding is lexically driven:

> Nothing in the speaker's message will by itself trigger a particular syntactic form... There must always be mediating lexical items...(Levelt 1989: 181)

Levelt's model (see Fig.1.1) provides us with a useful framework for a discussion of the mental lexicon, provided we remember that it is just one of several attempts to explain its workings (others will be mentioned below). He himself admits that "there is no single foolproof way of achieving the partitioning of a complex processing system" (ibid., p.14). However, it is based

on a solid foundation of empirical data obtained over several decades of psycholinguistic research and represents a refinement of earlier models proposed by Garrett (1975), Dell (1986) and Kempen and Hoenkamp (1987).

It should also be remembered that this is not a model of comprehension as such, although the comprehension system is used to monitor production. There is strong evidence to suggest that production and comprehension do not use the same mechanisms. Jarvella and Deutsch (1987) showed that speakers and listeners process the linguistic structure of a descriptive utterance in fundamentally different ways. This parallels the asymmetry between perception and production in vocabulary development (see 1.2.1 below).

1.1.1 A model of language production

Levelt's model is an integrated view of language production in which the lexicon plays a key role. We shall now look at its component parts more closely.

In the topmost box of Figure 1.1, labelled Conceptualizer (which, like the other boxes in the diagram should be seen as a processing sub-system rather than a specific neural location), messages are generated by the speaker, drawing on his knowledge of the world (encyclopaedic, situational, discoursal etc.). Various representational systems may be involved here—spatial, kinaesthetic, auditory etc.—but the message itself must be in propositional form. There are many different analyses of the semantic representation of the preverbal message, which we shall not go into here. However, it is clear that languages differ in the kinds of semantic features that are grammatically realized. The message encoding procedures which will take place in the Formulator must therefore take into account the language-specific requirements. During the process of language acquisition there will be some interaction between conceptualizing and grammatical encoding, but for the mature speaker the Conceptualizer and the Formulator have become autonomous (cf. Schriefers 1990; see 1.3.2 below for de Bot's adaptation of the model to the bilingual speaker).

It is at the Formulator stage of processing that the lexicon becomes directly involved. The preverbal message from the Conceptualizer undergoes both grammatical and phonological encoding to emerge as a phonetic plan. At that point, before it passes to the Articulator to be put into execution as a series of neuromuscular instructions, the plan is subject to monitoring through the

Speech Comprehension System: that is, a speaker can attend to his own internal speech and make repairs before he has fully articulated a segment. Self-correction can of course also take place after articulation, as indicated on Figure 1.1.

In Levelt's model the lexicon is accessed at two levels — for grammatical and for phonological encoding.[1] A lexical entry therefore consists of two principal parts: a lemma (a term introduced in this sense by Kempen and Hoenkamp 1987), containing the item's meaning and its syntactic properties, and a morpho-phonological form (or lexeme). Aitchison (1987) makes a similar distinction using the analogy of a coin, on one side of which word class 'labels' are tightly bonded on to the abstract meaning and on the other side the sound of the word is stored. This basic dichotomy between two kinds of internal organization in the mental lexicon is supported by tongue-slip data and tip of the tongue phenomena.

Each lemma has a lexical pointer which indicates where the corresponding word-form information is stored. During lexical access the pointer may be marked with various features that will affect the word form to be retrieved: case, number, person, tense, aspect, definiteness, pitch accent etc. (Levelt calls them diacritical features). It is a moot point whether an item's lemma and form properties are retrieved simultaneously or successively during lexical access. Butterworth (1989) presents evidence that there are two temporally distinct stages, the first accessing the 'semantic lexicon' and the second the 'phonological lexicon' (corresponding to Levelt's lemma and form lexicons). Levelt, however, believes that it is at least possible for a lexical entry to be retrieved as a whole, even if this does not always occur.

We may now list the main features of a lexical entry, taking an example from the lexical field of locomotion: the verb *run.* First, there is a set of conceptual conditions that must be fulfilled in the message in order for the item to be selected. The core meaning of *run* might be expressed as 'cyclic limb motion causing rapid linear motion' (Tuggy 1988). Second, there is a set of syntactic properties, including the category of the entry (V in this case) and the syntactic arguments it can take (e.g. an animate subject for the prototypical sense). Third, there is the morphological specification of the item. For *run* this would include the information that it is a root form (not analysable further into

[1] Empirical evidence for this two stage access is provided by Schriefers, Meyer and Levelt (1990) in a set of picture-word interference studies.

constituent morphemes), that its third person present tense inflection is *runs* and that its past tense inflection is *ran.* Fourth, there is the phonological specification: for *run* the structure is a monosyllabic consonant-vowel-consonant sequence, with /r/ and /n/ as consonants and /ʌ/ as vowel.

In addition to these four, there are probably other properties, such as pragmatic, stylistic and affective ones, which are stored with an item, as well as internal relations among the properties, e.g. the meaning of the word *traveller* relates to its morphology, the *er* affix expressing the agentive of the action indicated by the root verb — "one who travels"; the *er* affix is, moreover, a marker, when combined with a verb stem, of the syntactic category N.

1.1.2 Organization of the mental lexicon

Now that we have seen how the lexicon can fit into a general model of language production, let us consider the organization of items in such a lexicon. We will look briefly at the morphological and phonological aspects, before turning to what is more important for this work—semantic organization.

There has been considerable discussion as to whether word stems are stored separately from affixes in the lexicon (cf. Jarvella and Meijers 1983; Caramazza *et al.* 1988). Aitchison (1987) concludes that inflectional suffixes are usually added on as needed in the course of speech but that derivational prefixes and suffixes are already attached to their stems. This is substantially the view of Levelt. However, speakers can, if necessary, disassemble morphologically complex words and create new ones. The devices used for this vary from language to language—with agglutinative languages like Turkish at one extreme of complexity—though some are common to a wide range of languages (Cutler *et al.* 1985).

When it comes to phonology there is clear evidence that adults tend to remember the initial and final sounds of words more easily than the middle. Aitchison humorously calls this the 'bathtub effect'; it was first pointed out by Brown and McNeill (1966). The general rhythmic pattern of a word is also usually remembered (Aitchison and Straf 1982). This latter finding accords well with the general impression derived from the research findings that the phonological component of the mental lexicon is organized primarily in accordance with the needs of recognition (Fay and Cutler 1977, cf. Hurford 1981, Cutler and Fay 1982).

On the other hand the semantic organization of the lexicon appears to favour production. There is the clear grouping of words in semantic fields, for which evidence comes from word association experiments (e.g. Deese 1965), tongue-slip data (e.g. Fromkin 1973, 1980; Cutler 1982) and tip of the tongue experiments (e.g Brown and McNeill 1966). Within these fields, links between co-hyponyms (words at the same level of detail, including opposites of all kinds), as well as collocational links, seem particularly strong. Although some of the evidence is disputed (cf. Aitchison 1987: 106), there does seem to be a broad division of the lexicon into two categories of open and closed class items, roughly coinciding with the content-function distinction, but including in the closed class bound forms such as inflectional affixes for number and tense. The open class is generally regarded as constituting the 'lexicon proper'. Furthermore, the evidence from word association experiments and tip of the tongue guesses seems to indicate that words within each of the major syntactic categories of nouns, verbs and adjectives are closely linked together, with nouns and verbs in particular being kept distinct in the minds of speakers.

The links between items in the mental lexicon are clearly of many kinds. We can make a distinction between intrinsic and associative relations (Levelt 1989: 183). Items may be connected in the mental lexicon because they share certain features; these are intrinsic relations. This would seem to be the case with items in semantic fields as well as with morphologically determined and phonological connections between entries. But there is, in Levelt's view, no convincing evidence as yet for syntactically determined relations. The fact that in certain amnesic disorders whole word classes may become unavailable need not imply that their members have special mutual connections in the mental lexicon.

Associative relations, on the other hand, do not necessarily have any basis in their semantic properties; they may simply be the result of the frequent co-occurrence of the items in language use. Take *butter* and *knife* , the latter being, in one set of norms (Jenkins 1970), the sixth commonest response to the former. The initial connection between these items for an individual would in this case have been mediated by complex conceptual relations, but it then becomes a direct association between frequently co-occurring items, so that when one is used, the other will be primed, even in contexts where the original conceptual connection is not present, such as metaphorical cases.

Of course some intrinsic meaning relations, such as those in semantic fields, will also develop strong associative relations because meaning-related items

tend to co-occur in discourse. Thus, to take another well-established association in English, which we shall have occasion to refer to later, *come* will frequently activate *go* (Deese 1965).

Strong links also exist between the words which make up idioms and other stock phrases, so that it is reasonable to suppose that these are lexical entries in their own right and can be directly accessed (cf. Swinney and Cutler 1979; Cutler 1983; Gibbs and Gonzales 1985). This kind of 'preassembled speech' (as Bolinger 1975 calls it), particularly idioms, has been much studied by linguists (e.g. Makkai 1972; Cruse 1986), but not much is known about how speakers generate idioms in their mental lexicon.[2]

The organization of the mental lexicon, especially in its semantic aspects, is determined, at least in part, by memory considerations. The grouping of lexical items in word classes and the clustering of co-hyponyms provide structures which assist the remembering of large numbers of items. The importance of semantic factors in long term memory led Tulving (1972) to make a distinction between semantic memory, which he defined as "a system for receiving, retaining and transmitting information about meanings of words, concepts and classification of concepts", and what he called episodic memory, which is concerned with "memory for personal experiences and their temporal relations" (Tulving 1972: 401–402). This has seemed an attractive dichotomy to many and Schaefer (1980), for example, has tried to apply it to second language vocabulary learning, mastery of a second language being seen as the integration into semantic memory of lexical items initially acquired via episodic memory.

However, many psychologists have doubted whether Tulving's distinction reflects a clear dichotomy between separate storage systems rather than "two modes of operation of the same system" (Baddeley 1990: 418). According to Wingfield and Byrnes (1981: 124) the two types of memory may rather represent different ends of a continuum on which unique temporal and personal references are gradually forgotten through their frequent use in a variety of contexts. Miller and Johnson-Laird (1976) see the two types as more likely representing different ways of retrieving information from memory and they find it simpler to think of a single long term content-addressable memory to which access can be gained by a variety of different kinds of contents, which,

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[2] Lexical phrases have been seen as important enough to provide the basis for a whole approach to second language teaching (Nattinger 1980; Nattinger and DeCarrico 1992).

they speculate, might include 'action', 'geographic' and 'person' types as well as the semantic and episodic.

While other dichotomies in long-term memory have been proposed, such as *procedural-declarative, implicit-explicit, direct-indirect* and *autobiographic-generic* (Baddeley 1990), Tulving himself has gone on to develop a ternary model (Tulving 1985), in which episodic memory is a specialized subsystem of semantic memory, and this in its turn is a subsystem of an all-embracing procedural memory.

The semantic-episodic memory distinction is however accepted by Paivio (1986) in an up-dated version of his dual-coding theory. This theory posits two separate sub-systems in human cognition, one specialized for the representation and processing of information concerning nonverbal objects and events, the other specialized for dealing with language (Paivio 1986: 53). The two systems are functionally independent but also inter-connected, allowing language, for instance, to be deeply influenced by a non-linguistic representational system with fundamentally different structures and processes. Dual-coding theory has played a part in the development and testing of imagery-based mnemonic techniques for vocabulary learning, such as the keyword technique (on which see Pressley, Levin and McDaniel 1987). However, Baddeley (1990: 106) describes research which suggests that concrete and imageable items are easier to remember, not because of dual coding, but simply because they are represented more richly within the long-term semantic memory system.

1.1.3 Theories of lemma access

If Levelt is correct in seeing the process of grammatical encoding as lexically driven (a view that is no by no means universally accepted — cf. the work of the 'Amherst group', summarized in Frazier 1989), then it is clearly vital for theories of language production to show how lemmas are accessed. However, very little is known about this process, which is not surprising, as Levelt points out, in view of the magnitude of the problem: the large size of an individual's vocabulary and the phenomenal rate at which it is accessed.

Estimates of average vocabulary size vary enormously. A great deal depends on how one defines a word and what constitutes a person's knowledge of it. Estimates are typically based on dictionary sampling and extrapolating from the average results of tests using the samples. Seashore and Eckerson's (1940) figure of 150,000 words for educated adults included a large number of

derivatives and compound words. Oldfield's 1963 estimate for the vocabulary size of Oxford undergraduates was 75,000 words. Another estimate, for college students, put the figure as high as 250,000 (Diller 1978). However, using very careful methods, much lower figures of around 20,000 'base' words for undergraduates have been obtained recently (Nagy and Anderson 1984; Goulden *et al.* 1990) and this seems more realistic.

The figures for access rates are much more in agreement. Maclay and Osgood (1959) found that a speaker with a normal speech rate produces about 150 words per minute; that is, on average, one every 400 milliseconds, a rate which can be doubled under time pressure to one every 200 milliseconds. Lenneberg (1967) measured syllables and came up with a rate of 6 syllables per second which, at an average of at least three words a second, gives a slightly higher rate than Maclay and Osgood's normal speed. As for recognition, Marslen-Wilson and Tyler (1980) have shown that speakers can recognize a word in their language in 200 milliseconds or less from its onset, in many cases well before all the word has been heard.

A normal speaker therefore makes the right choice from among thousands of possibilities between two and five times a second and can keep this up for long periods. The error rate is surprisingly low. Using the London-Lund corpus of spontaneous conversation, Garnham *et al.*(1982) found just 191 slips of the tongue in 200,000 words — about one slip per 1,000 words — of which almost half were lexical slips. Hotopf (1980) identified no more than 125 whole-word slips of the tongue in the tape recordings of eight conference speakers. Although there is obviously some individual and situational variation in the frequency of both productive and receptive errors, what is remarkable is that they occur so rarely.

It is difficult to see how a purely sequential model of processing can account for such accurate high-speed access. Some kind of parallel processing would seem to be needed. Speech errors, when they occur, may reveal the simultaneous activation of two near-synonyms, such as *stummy* for *tummy* and *stomach* (Fromkin 1973). If all conceptual fragments that form a message are simultaneously available, each initiating its own search for a lemma, it is not surprising that occasional syntactic confusions may arise, as in another example from Fromkin's corpus, where presumably BUY, NUTS and KIDS were all activated but produced *I wouldn't buy kids for the macadamia nuts* instead of the intended message.

In Levelt's model, the higher level processes of message generation and monitoring are described as controlled activities requiring the speaker's continuous attention. The lower level processes of grammatical and form encoding and articulation, on the other hand, are assumed to be largely automatic and can proceed in parallel. Levelt endorses the incremental production grammar of Kempen and Hoenkamp (1987), which combines serial and parallel processing:

> Sentences are built not by a central constructing agency which overlooks the whole process but by a team of syntactic procedures (modules) which work—in parallel—on small parts of the sentence. (Kempen and Hoenkamp 1987: 225)

This is not the place for a comprehensive review of the many other models of lexical access that have been proposed (see Norris 1986 for a survey). A few will, however, be briefly mentioned.

In logogen theory (e.g. Morton 1979), lexical items are mentally represented as logogens, which form their own system between the cognitive system on the one hand and input and output buffers on the other. Logogens are not like dictionary entries but act as devices that collect evidence for the appropriateness of word; thus they could be compared to lemmas. As soon as the collected pieces of evidence exceed the logogen's predetermined threshold, the word form is activated. This threshold is reduced every time the logogen is active, with the result that higher-frequency words in a language have lower thresholds associated with them and so require less processing to yield access.

Decision-tables, proposed in Miller and Johnson-Laird (1976), are similar to the earlier idea of discrimination nets (otherwise known as flow charts) in that they involve running a set of tests in order to retrieve a lemma, but in this case the tests can be run in parallel (see Miller and Johnson-Laird 1976: 284 for an example).

Spreading activation theories (e.g. Anderson 1983; Dell 1986; Rumelhart *et al.* 1986) are a type of connectionist or 'parallel distributed processing' theory that has become very popular in recent years. In general terms these theories involve networks of connected nodes, which can be in various states of activation and can spread (or block) their activation to the nodes with which they are connected. Such a model takes care of real-time limitations and would seem to work well for phonological encoding (cf. Dell 1986, 1988). It might also work for lemma access, but the problem would be to account for convergence.

Assuming that there are no real synonyms in a language (cf. Clark 1987, 1988), the accessing algorithm must eventually converge on a single 'correct' item. If there was a simple one-to-one correspondence between concept and word, as there is substantially with proper nouns, convergence would be a simple matter. Unfortunately this is not generally the case, and a lexical access theory therefore has to show how the matching process actually works.

Levelt emphasizes the inadequacy of existing theories in their handling of convergence, in particular of what he calls the hypernym (more correctly, hyperonym) problem:

> When lemma A's meaning entails lemma B's meaning, B is a hypernym of A. If A's conceptual conditions are met, then B's are also necessarily satisfied. Hence, if A is the correct lemma, B will (also) be retrieved. (Levelt 1989: 201)

For example, because the meaning of *dog* entails the meaning of *animal,* why does a speaker who intends to express the concept of **DOG** not say *animal* instead of *dog?* More generally, what is to prevent speakers always talking in hypernyms: *the person moves* instead of *the man walks* or *the thing travels* instead of *the plane flies*? Levelt therefore proposes three principles that have to be satisfied in order to solve the hyperonym problem:

1. No two lexical items have the same core meaning (the *uniqueness* principle)

2. A lexical item is retrieved only if its core condition is satisfied by the concept to be expressed (the *core* principle)

3. Of all the items whose core conditions are satisfied by the concept, the most specific one is retrieved (the principle of *specificity*)

1.1.5 Conclusion

The discussion of Levelt's model has helped to focus our attention on the problems of describing the mental lexicon. As with any other domain which is not directly observable, we have to rely on analogy and metaphor[3]; these are, however, not always recognised as such. A recurring metaphor in the past for memory in general and for the mental lexicon in particular was the library, in which words are likened to the books on the shelves (Marshall 1977). In the late twentieth century the dominant metaphor—derived from the current technology—is that of the computer. This has usually been of the standard digital type, but now that the limitations of that particular model are being

[3] cf. the work of Lakoff and Johnson (1980), which will be referred to in the discussion of cognitive semantics in Chapter Two.

realized (cf. Elman 1989: "the brain is not at all like the von Neumann computer"), it is the parallel distributed processing type of computational framework which is increasingly favoured.

Much of the ground that has been covered in this section is inevitably controversial and subject to future developments. We should remember that the concept of lexical access, on which a good deal of the discussion has been centred, is a highly differentiated one:

> In its widest sense, it appears to be involved in both subliminal and supraliminal perception, and is further fractionated... [Thus] we can 'think' words (accessing content without form), as well as read them, write them, speak them and hear them. And possibly, we can 'rehearse' them in the sense of treating them as purely formal objects, without (conscious) reference to their meaning, in situations where rote learning is called for. (Garman 1990: 296)

The remaining sections of this chapter will deal with lexical issues in both first and second language acquisition.

1.2 The acquisition of lexis in a first language

Lexical acquisition, unlike syntactic acquisition, is a lifelong process. Whereas an individual's grasp of his language's structures is virtually complete by the age of six (if we exclude certain formal patterns used in written language), his vocabulary growth never stops, even after he leaves the education system. As Wilga Rivers points out, this is one area of language learning which does not seem to be slowed down by increasing age:

> It seems rather to become easier as one matures and one's knowledge of the world and the differentiations in the realm of thoughts broaden. Even in a foreign language, the first ten words are probably the most difficult one will have to learn. (Rivers 1981: 123)

A distinction is often drawn between active and passive (or production and reception) vocabulary. Children certainly hear, and possibly have a limited understanding of, a great many words before they start uttering any themselves. There is evidence that differences between recognition and production vocabulary continue much later (Clark and Hecht 1983).

We shall look first in some detail at the conceptually difficult initial stage of acquisition and its immediate sequel before going on to consider adult lexical acquisition more briefly.

1.2.1 How children acquire lexis

Parents tend to have vivid recollections of their offspring's first efforts to use words, but there is good evidence that many early 'words' are better described as ritual accompaniments to particular situations; Aitchison (1987) gives the example of a child who shouted 'Dut' whenever he, and no-one else, knocked a toy duck off the edge of the bathtub, and did not use the 'word' at any other time. Language (and lexical) development can only really be said to begin when sounds, such as the labial sequences *mama* and *papa* which children babble spontaneously from about the age of six months, are regularly treated as symbols. Somewhere between the ages of one and two there is a sudden increase in vocabulary size, as children try to label the objects around them (Nelson 1973; McShane 1980). Aitchison (1987) refers to this as the 'Labelling' stage, which is then followed by the 'Packaging' and 'Network building' stages.

It may not be appropriate, however, to speak of a child's lexical development in terms of words or the conventional minimal unit of meaning—the morpheme —at least in the early stages (Peters 1983). The first units of language acquired by children frequently consist of more than one (adult) word. Such units are stored in the lexicon and retrieved just as a minimal unit would be. In due course they can be broken down into smaller units, but the larger unit may remain in the lexicon after the segmentation. The opposite process (called fusion by Peters)—by which frequently grouped items are stored together in the lexicon for easier retrieval—occurs both in child and adult language (see 1.1.3 above and 1.2.2 below).

The next stage in a child's lexical development (Aitchison's 'Packaging' stage) occurs when he begins to categorize the world using the terms he has learned. At this stage, a child "may use the same words an adult uses, but with different, more perceptual bases for them" (Miller and Johnson-Laird 1976: 296). From the adult point of view, he will undergeneralize and overgeneralize the meanings of words. Lakoff (1987), cites several studies which show that children are likely to learn first the names of basic-level (or 'folk-generic') categories (see 2.3.1 below).[4]

There is also evidence of the importance of prototypicality structure in lexical development. Bowerman (1978) describes her daughter's use of *kick*

[4] Carey (1982), however, denies that children necessarily learn first the basic colour terms of Berlin and Kay (1969).

between the ages of 16 months and two years, organized around a prototypical kicking episode and generalized to cover, among other actions, flapping butterflies and hitting with a stick. It seems that several distinct features of the prototypical action — the flailing of limbs, sharp contact with a limb or limb extension — were the basis for the lexical extension.

The final stage of lexical development — Aitchison's 'Network building' — is reorganizational and takes place over a longer period: Anglin (1970) speaks of the "lethargy of semantic development". The limited contexts in which children learn the meanings of words may explain why collocational links are more important for them (as seen in word association experiments, cf. Entwisle 1966), but, as the semantic network develops, links between co-hyponyms start to appear.[5]

At the same time as their semantic development, children are also learning to cope with the sound structure of words. This process has been likened to puzzle solving (Aitchison 1987). The problems of word identification lead children to concentrate on rhythmic structure and stressed vowels. Having to match articulatory sequences with auditory images and produce them smoothly and quickly results initially in deformations, which are gradually overcome as the child's vocabulary stock increases.

The connection between vocabulary development on the one hand and maturation and cognitive development on the other—in both first and second language learning—is clearly very important. Knowledge of the world enables us to increase our vocabulary stock in almost exponential terms, since once a fragment of the target language has been mapped on to this knowledge it becomes possible to acquire other words indirectly by inferring their meanings from the contexts in which they occur or by being given explicit definitions of them (Johnson-Laird 1987: 202). This considerable expansion in vocabulary size begins around the age of five or six and continues until about the age of eighteen, more or less coinciding with the period of formal schooling (see Fig. 1.2[6]). However, relatively little is known about these later stages of lexical development (McShane and Dockrell 1983). This is a pity, since, as Meara

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[5] There may be a language-specific problem for speakers of English if, as Corson (1985) claims, there is a 'lexical bar' in the lexicon, which hinders the users of working-class dialects from full access to the use in their language of the semantically precise lexis of secondary and higher education. The bar refers to the gap between the largely monosyllabic and Anglo-Saxon-derived vocabulary of conversational English and the morphologically complex Graeco-Latin vocabulary of the English of academic studies.

[6] It is not clear if the figures on which it is based refer to production vocabulary or to all known vocabulary.

(1988) has suggested, second language vocabulary acquisition is more like the later stages of L1 acquisition than the earlier ones, and it would be helpful if we knew more about the development of adolescent vocabularies, especially how new vocabulary is integrated into existing networks.

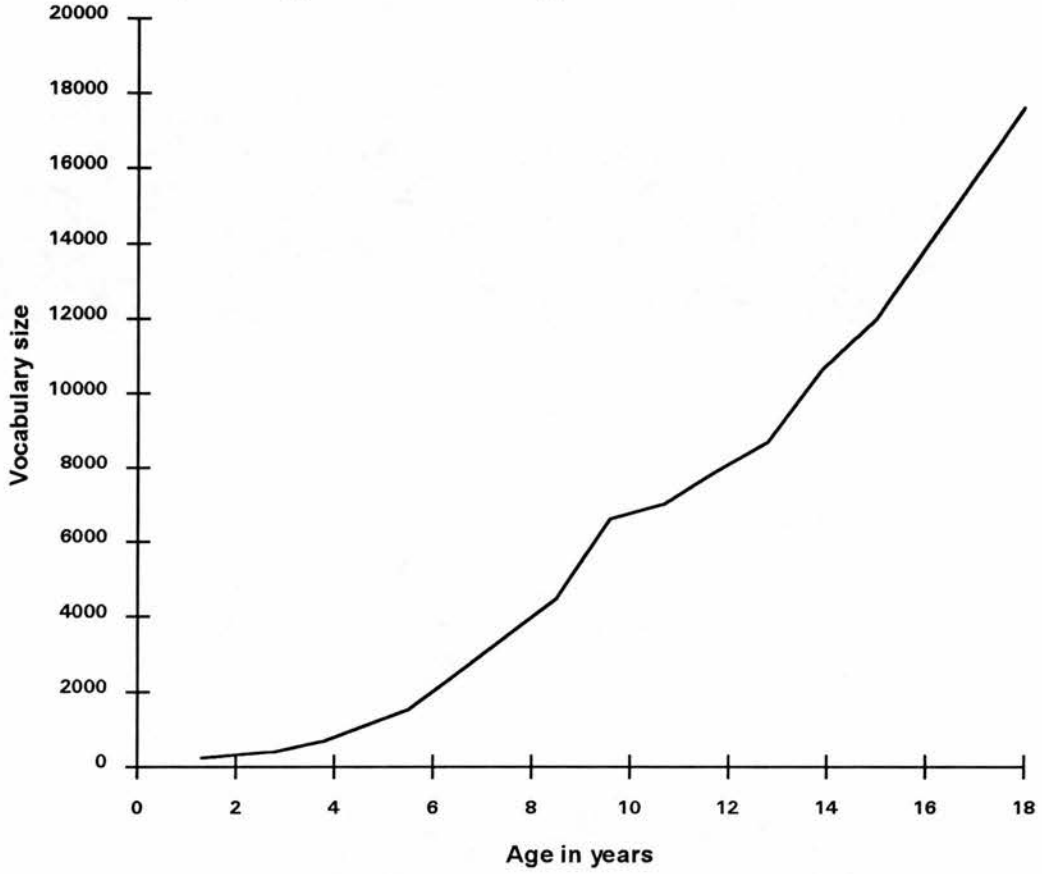

Figure 1.2: Growth in vocabulary size with age (based on figures in Fries and Travers 1950)

1.2.2 Adult lexical acquisition

The growth of an individual's vocabulary continues into adulthood, albeit at a much slower rate. Further education and training will bring about an increase in certain areas, as will membership of certain groups, such as political parties and religious organizations, and participation in sports and hobbies. As we have seen, not much is known about this stage. It may be that it eventually levels off, although, as Rivers says (see above), the capacity for word learning does not seem to be lost with advancing age; there is always a potential for semantic recategorization. Nevertheless, if English is typical in this respect, the greater part—perhaps two-thirds or more—of native vocabulary will remain unknown to most people (Goulden *et al.* 1990); this unknown vocabulary consists largely

of specialized scientific and technical terms.

There are two processes that will continue to be important in adulthood and which have received a fair amount of attention. The first is lexical extension, including metaphor and metonymy. Metaphor, which in its widest sense involves the use of a word with one or more of its 'typicality conditions' broken, is sometimes used spontaneously by children, but according to one study (Pollio *et al.* 1977), this kind of use of metaphor decreases in later childhood. Adults tend to use metaphor rather more predictably: there are conventional sources of metaphor, such as the human body, which permanently attract a large number of metaphors (Smith *et al.* 1981).

The second process is word creation, using some of the common word formation processes, which in English are: compounding, conversion to another part of speech, affixation and reanalysis. Aitchison (1987) refers to this facility for word building as the 'lexical tool-kit' and points out that

> Most new words are not new words at all, they are simply additions to existing words or recombination of their components. Words which are created out of nothing are extremely rare... But even these are only partially new, since they always follow the existing sound patterns of the language. (Aitchison 1987: 153)

Both the processes we have mentioned reinforce the view that

> The mental lexicon is not a fixed dictionary with a set amount of information about each word, but an active system in which new links are continually being formed. (ibid: 162)

1.2.4 Conclusion

Most of the research findings referred to in this section have been based on speakers of English and it is pertinent to ask how far they would apply to other languages. The work that has been done so far on other languages reveals differences as well as similarities (cf. Slobin 1985). There is evidence, for instance, of possible differences in phonological storage between English and Welsh speakers (Meara and Ellis 1982) and in morphological storage between English and Dutch speakers (Jarvella and Meijers 1983). One should also bear in mind that most of the normal adult speakers on whom the English research has been based are both literate and monolingual, neither of which is typical in a global perspective. It has been estimated that half the world's population is bilingual (Grosjean 1982). As Chapter Four will show, the present work is based on research carried out in a society where bilingual, trilingual and even quadrilingual patterns of behaviour are common.

We shall now turn our attention to lexis in a second language.

1.3 Lexis in a second language

This study is concerned with speakers for whom English is a second language (more accurately a third or even fourth language — see Chapter Four). None were aged less than 13, so we may assume that all had acquired a fairly extensive vocabulary in at least one other language even before they started the formal learning of English (from about age 6 onwards). That there is no *fundamental* difference between first and second language acquisition is an assumption that has already been stated in the Introduction. As Aitchison puts it:

> L1 and L2 acquisition are likely to be governed by the same universal principles, which function throughout life—though there will inevitably be important differences between L1 and L2 acquisition due to interference, differences in processing capacities... general decreasing plasticity, and a failure to keep acquisition abilities active, rather than to any type of language ability shutdown. (Aitchison 1988: 348)

Empirical support for a universal theory of language acquisition also comes from data collected in the Kiel Project on Language Acquisition from several different L1 and L2 situations (Wode *et al.* 1992).

The relevant issues concerning lexis in a second language can be grouped in three broad categories of *learning* (see 1.3.1 below), *organization* (see 1.3.2) and *use* (see 1.3.3) (cf. Gass 1987; also Levenston 1979). There are some, like Sharwood Smith (1984), who would insist on a strict theoretical and methodological separation between organization and use (or knowledge and control, in Sharwood Smith's terms). However, it seems more plausible to follow Meara (1984) and Gass (1987) in viewing all three areas as inextricably interrelated, so that it may be difficult to find a question in one category which does not involve at least one of the other categories. Figure 1.3 shows some of the interconnections between the issues.

It is useful at this point to introduce the term *interlanguage,* much used in second language research, although not without its critics (e.g. Cook 1977; for a review and a defence see Selinker 1992). This has been defined as

> the systematic language performance (in production and recognition) by L2 learners who have not achieved sufficient levels of linguistic knowledge or controls of processing to be identified completely with native speakers. (Bialystok and Sharwood Smith 1985: 116)

Interlanguage theory is still very much in the process of evolution. Tarone (1983), for example, has introduced the idea of an interlanguage continuum, ranging from the 'vernacular style' at one end to the 'careful style' at the other.

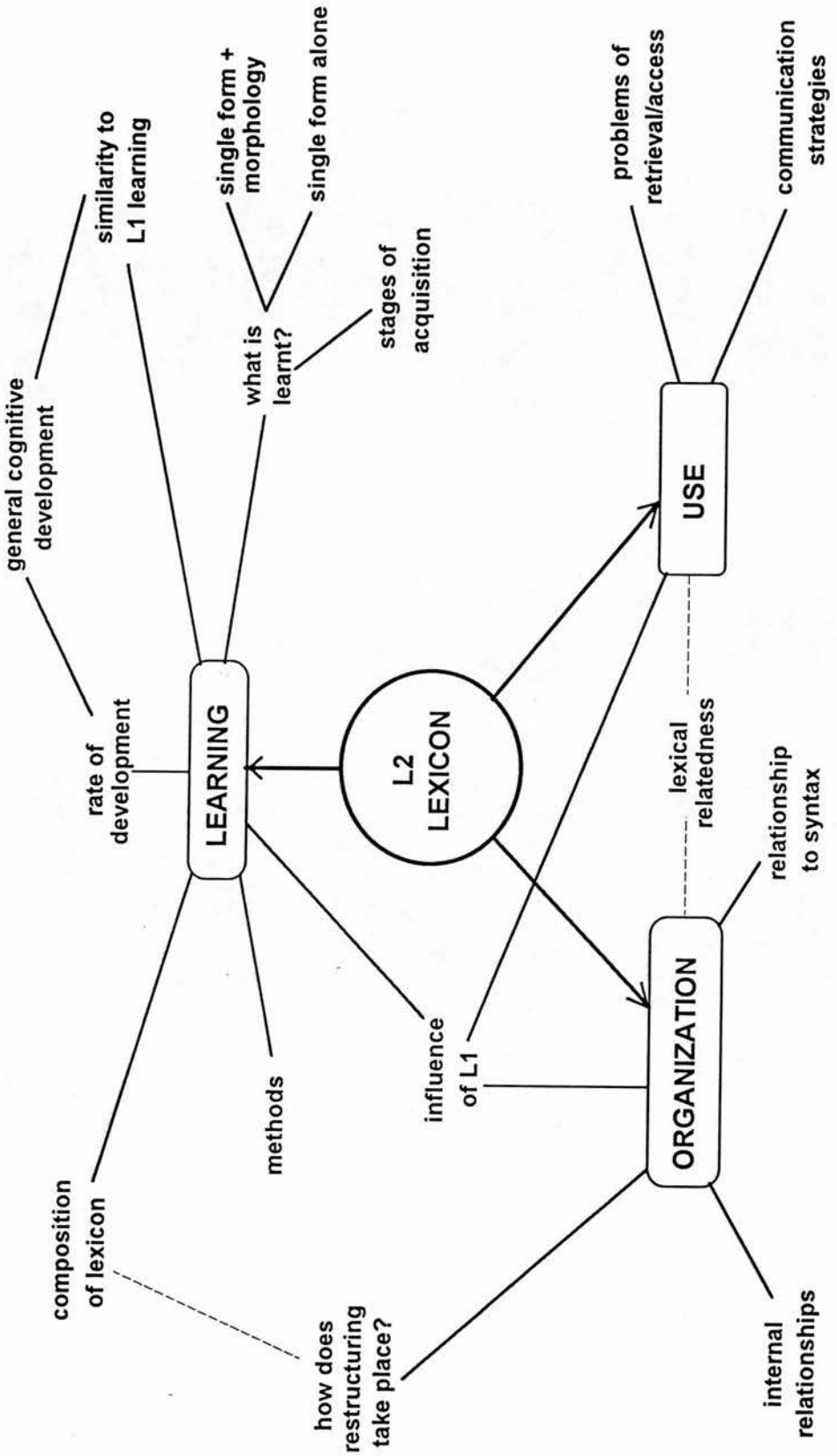

Figure 1.3: Issues in second language lexical acquisition and use (based on Gass 1987)

Despite the growing number of lexically-oriented research studies mentioned in the Introduction, the lexicon in second language research is more often discussed as a side issue than as the major area of research (Gass 1988a). Thus researchers whose main interest may be in communication strategies (e.g. Tarone) or in language transfer (e.g. Kellerman) will use data which is basically lexical. As Gass (1988a) also points out, most second language lexical studies are not primarily concerned with establishing a theory of the lexicon, but deal instead with descriptive aspects; the majority are also, according to Meara (1989), one-off studies which do not form part of a coherent plan.

To illustrate the last point, we may take the considerable amount of work that has been done on learners' lexical errors, described by Meara (1984) as the classic research tool in the investigation of lexical interlanguage. Examples of such studies include Duškova (1969), Myint Su (1971), Ringbom (1978, 1982) Laufer (1986) and Zimmerman (1987). Linnarud's (1986) study of lexis in composition is also partly in this tradition. Meara characterizes most of them as useful descriptive studies which are, however, essentially post-hoc analyses with little predictive or explanatory power. This view reflects a widespread dissatisfaction with 'traditional' error analysis *per se* and a trend towards more balanced investigations of interlanguage in which error analysis can still play a role, albeit reduced.

We shall now consider the three aspects of L2 lexis in turn.

1.3.1 Learning

The actual rate and manner of growth of the learner's lexical stock has not been much studied. In one of the few existing studies, Jamieson (1976 cited in Nation 1990) found that the rate of vocabulary increase was similar for five- and seven-year-old native speakers of English in New Zealand and for Tokelauan learners of English as a second language who were in the same school system, but that second language learners did not bridge the gap between their vocabulary size and that of the native speakers which already existed when they entered the school system. In another study, which looked at immigrant second language learners in Canada, Cummins (1981) showed that this gap can be narrowed, but only after a number of years of English-medium education.

It is possible that some areas of the lexicon may grow faster than others. In his study Cummins (1981) found that immigrant ESL learners rapidly acquired

the vocabulary for 'basic interpersonal communication skills', but were less successful in acquiring the academic vocabulary that was needed for school work.[6] Palmberg (1987) carried out a longitudinal pilot study of vocabulary development in a small group of Swedish schoolchildren learning English, without however coming to any very definite conclusions, apart from showing that acquired vocabulary tends to reflect individual interests.

The learner tends to find some words more difficult than others. This could be due to morphological complexity or phonological difficulty (Laufer 1990) but semantic considerations probably operate here as well (e.g. cross-linguistic mismatches). Levenston and his co-worker Blum-Kulka have done considerable work on lexical simplification strategies, by which is meant how learners cope with situations where they want to avoid certain types of words when they are operating in their L2 (Levenston and Blum 1977, Blum and Levenston 1978a,b).

In the early stages of learning another language the learner usually seeks to reduce his learning task by finding similarities to his L1 wherever possible (Ringbom 1983). He relies at first on simple translation equivalents and in consequence errors proliferate. As learning progresses, he gradually becomes aware of the dangers of this approach and will stop equating L1 and TL words, sometimes going too far in the other direction, as Kellerman's work (see 1.4 below) shows. Therefore even at an advanced level lexis presents considerable problems for the L2 user (Marton 1977).

The fundamental question of what 'knowing' a word actually means (Gass 1988a) illustrates very well the difficulty of keeping our three categories apart; this clearly involves Organization and Use as well as Learning. Ringbom (1987) suggests that lexical knowledge varies along a number of different dimensions which include accessibility, morpho-phonology, syntax, semantics, collocation and association. It may be difficult to distinguish clear stages in the process of acquiring a word or to identify a threshold which has to be crossed before a word can be said to be 'properly' acquired (and, if this were possible, to decide what types of activity could lead to this threshold being crossed).

> We should think of vocabulary knowledge as a continuum between ability to make sense of a word and ability to activate the word automatically for productive purposes (Færch *et al.* 1984: 100).

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[6] This could be compared with the 'lexical bar' mentioned in note 5 above.

This statement reflects a view that the commonly used terms 'active' and 'passive' vocabulary indicate no more than the ends of a continuum (Melka Teichroew 1982). In some foreign language learning circumstances, where the learner of an unrelated language has no contact with the target language outside the classroom, it can be claimed that his 'active' vocabulary may be identical with his 'passive' vocabulary (Ringbom 1987).

However, Meara (1990) believes that there is a qualitative difference between active and passive vocabulary (cf. the reference to recognition and production vocabulary in L1 acquisition, 1.2.1 above). Using graph theory as an explanatory framework, he suggests that active vocabulary is vocabulary that can be easily accessed from anywhere in the vocabulary network and that itself gives access to other parts of the network, while passive vocabulary can only be accessed with appropriate external stimulation (a point that Ringbom 1987 also made). If Meara is correct, this would have important implications for the teaching of vocabulary.

There are several specific questions related to the vocabulary acquisition which are of particular interest to language teachers. Thus: is it possible to identify one method of learning as better than others — for example, are words best learned in lists or in contexts? (on this see Nation 1982; Clarke and Nation 1980; Liu Na and Nation 1985); how does indirect learning (through reading, or listening, or a combination of both) compare with direct learning? (Johnson 1980; Sarawit 1980; Saragi *et al.* 1978); does training in vocabulary learning techniques help? (e.g. the keyword technique — see Pressley *et al.* 1982); what part do dictionaries, bilingual or monolingual, play in vocabulary learning? (Béjoint 1981; McFarquhar and Richards 1983; Tomaszczyk 1981; Meara and English 1988).[7]

Another important pedagogical issue concerns the actual words that should be learned. This is of great interest to textbook writers and syllabus designers and was much debated in the heyday of the vocabulary control movement, which assumed that the number of words must be strictly limited (for a survey see McArthur 1978), but has also come to the fore again with the development of lexical syllabuses and the notion of core or nuclear vocabulary (Carter 1987; Stubbs 1986). Apart from frequency and range, other criteria need to be used in

[7] Trilingual dictionaries are also a possibility (cf. Zgusta 1980) and are certainly relevant in the Kenyan language situation (see Chapter 4).

preparing word lists for learners (Richards 1970), for example, coverage—the capacity of a word to take the place of other words—is clearly important (Mackey and Savard 1967; see also Mackey 1965).

We also need to ask what it is that is actually learned of a word: is it a single form to which morphological rules are immediately applied or a single form used for a multiplicity of functions? To be able to answer this, we have to look at organization.

1.3.2 Organization

We may begin this section by returning to Meara's question quoted in the Introduction: *what does an L2 learner's mental lexicon look like and how does it differ from that of a monolingual native speaker?* In the Birkbeck Vocabulary Project word association tests[8] were used to investigate the semantic structure of the learner's lexicon (Meara 1978, 1982, 1984) as well as the nature of the phonological entries in it (Meara and Ingle 1986). The results would seem to suggest that there are major differences between native speakers and learners in the way they store and handle words (as Henning 1973 had also found). The learner's lexicon

> is more loosely organized and the semantic factors are frequently overridden by extraneous phonological factors, such as the chance resemblance between a form in the L1 and another in the L2. (Meara 1984: 234)

(However, we should not forget that malapropisms do occur in L1 production.) Meara and Ingle (1986) looked at the errors made by English-speaking learners of French in recalling French words; it is suggested that learners may be applying similar strategies to those of children learning their L1.

Laufer (1986) also provides some evidence for a largely phonological type of organization in the interlanguage lexicon, in which the salient features of lexical items would appear to be grammatical category, stress pattern and initial sounds. On the other hand, Singleton and Little (1991) present data suggesting that the way words are processed depends on the degree of difficulty of the lexical task concerned and that there is some degree of interaction between L1 and L2 lexical processing.

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[8] These have been extensively used in first language research. The Kent-Rosanoff list of 100 items, originally designed in the early years of this century to investigate mentally disturbed patients, has been the basis of many psychological studies of verbal behaviour (cf. Postman and Keppel 1970) and has been used in research with bilinguals (e.g. Lambert and Moore 1966)

When we look at the question of how L2 vocabulary is integrated with L1 vocabulary, we raise the controversial issue of the bilingual lexicon. It is difficult to draw a clear line between advanced learners and 'bilinguals'; much of the research having been done with subjects whose claims to fluency have not been validated by an independent measure.

A number of experimental studies have attempted to test conflicting theories as to the nature of the mental lexicon of bilinguals: whether they have two separate lexicons or a single integrated one. McCormack's (1977) review of the evidence then available (quoted in Meara 1983) concluded that there was general support for the single store position but with some exceptions.

Potter *et al.* (1984) found no evidence for a direct association between words in the two languages of two bilingual groups, but reported results that were consistent with mediation between the languages via an underlying conceptual system. This was substantially the conclusion of Schwanenflugel and Rey (1986). However, another series of experiments (Kirsner *et al.* 1984), involving English-Hindi as well as English-French bilinguals, led to the conclusion that "although the unit of lexical representation is language specific, the units function in an integrated network".

In a wide ranging survey of experimental evidence, Kirsner (1986) concluded that it is morphology rather than language that determines the boundaries between lexical categories in the bilingual lexicon. Furthermore, contact between lexical representations involves access to a language-independent medium, "although the character of this medium is unclear" (Kirsner 1986: 41). Nevertheless, in the same volume as Kirsner's survey, Hummel (1986) presented findings, derived from experiments testing memory for passages repeated either in the same language or in translation, that support separate systems of bilingual lexical organization. Green (1986) proposed an inhibitory control for a bilingual speaker which implies two separate systems. Frenck and Pynte (1987), using evidence from across-language facilitation on a lexical decision task, indicated qualified support for a common semantic store.

Hamers and Blanc (1989), after reviewing some of these rival theories, concluded that a dual-coding model, derived from Paivio's work (see 1.1.2 above), provides the best explanation of the available evidence. In this model, there are three access channels to representations: an imagery channel and two verbal channels (for each of the bilingual's languages); the two verbal channels

are linked in a common semantic store organized into concepts and propositional representations.

An even more radical view, which is claimed to be compatible with all the observed facts, is that of Paradis (1987). This is the Subset Hypothesis:

> Both languages are stored in identical ways, in a single cognitive system (*langage*), though elements of each language (*qua langue*), because they normally appear only in different contexts (elements of L_1 in the environment of other elements of L_1, and elements of L_2 in the environment of L_2) form a *de facto* separate network of connections, and thus a subsystem within a larger system (that comprises both). (Paradis 1987: 9)

There are subsets therefore for each of the different languages and also a larger subset containing lexical elements from different languages. This model offers a convincing framework for the code-switching behaviour found in many bilingual or trilingual communities, such as the Kenyan situation described in Chapter Four.

The Subset Hypothesis finds favour with de Bot (1992) in his adaptation of Levelt's model (described in 1.1.1) to bilingual production. Levelt assumed that the Conceptualizer is language-specific, but de Bot suggests that while this might be true of the microplanning stage, macroplanning might be language-independent. It is not clear how the model would handle lexical gaps. Learners seem to be able to anticipate lexical problems and use different strategies to avoid them (cf. the work of Levenston and Blum cited above; also Tarone 1983); this could occur at the microplanning stage. The preverbal message would presumably contain information to identify the language in which the utterance (or fragment of one) is to be produced.

As for the Formulator in Levelt's model, de Bot proposes a separate processing system for each language. Lexical items are selected from a common lexicon "in which items are connected in networks which enable subsets of items to be activated." Lemmas may not be tied to a single form, as in the unilingual case, but link with various form characteristics depending on the language involved (de Bot refers specifically to agglutinative languages like Finnish and Turkish). The different formulators then pass on their speech plan to an Articulator which is not language specific and which stores the possible sounds and prosodic patterns of the individual's languages; this single storage would presumably account for the high degree of phonological 'interference' found in much L2 production, except at the highest end of the proficiency scale (shading off into 'balanced' bilinguality).

The question of the relationship between the lexicon and general syntactic rules has already been mentioned in the earlier discussion of the mental lexicon (see 1.1). As far as interlanguage is concerned, Ard and Gass (1987) have also raised the intriguing possibility that what appears to be syntactic acquisition in the learner may more appropriately be described as lexical or semantic acquisition. Selinker (1969) had earlier pointed out semantic effects on interlanguage syntax.

1.3.3 Use

Finally, we come to the way the second language learner uses his vocabulary. We may ask whether the processes of access and retrieval used by the learner are similar to those that have been proposed for L1 lexical use. Are there, for example, different patterns for closed and open class items, as seems to be the case with L1 lexis? No clear answers to these questions have yet emerged.

The problems of access and retrieval for the learner may be exemplified in his 'communication strategies'. These have received considerable attention in SLA research (Faerch and Kasper 1983; O'Malley and Chamot 1990; Bialystok 1990). According to Bialystok, these strategies are common to all speakers, whether of first or second languages, but are no more than aspects of ordinary linguistic processing.

Learners' lexical performance errors have, as already noted, been the basis for much research into lexical interlanguage. Laufer (1987) and Zimmerman (1987) have verified Henning's (1973) finding that formal similarity between words can be a major source of interference in recall as well as in learning. Heikkinen (1983) has investigated the question of whether the learner's performance errors are systematically different from those of the native speaker (slips of the tongue, etc.), concluding that they are indeed different and that this is due to the influence of situational and interactional factors, which are not the same for native and non-native speakers. Thus native speakers are more concerned about interactional correctness than the learner, who focuses more on linguistic programming.

The relationship between lexical and overall linguistic competence is of considerable interest to teachers and language testers. According to Saville-Troike (1984), "vocabulary knowledge is the single most important area of second language competence when learning content through that language is

the dependent variable". Meara and Buxton (1987) found that scores on a Yes/No vocabulary test produced a significant degree of association with an extended test of overall ability (the Cambridge First Certificate). Laufer (1992), in a study with Hebrew and Arabic learners of English, showed that vocabulary size was a good predictor of reading comprehension level in a foreign language.

The question of L1 influence on second language lexical use will be discussed in the next section in the context of the whole issue of cross-linguistic influence.

1.4 Cross-linguistic influence

The influence of one language on the acquisition of another is a wide and controversial topic. The broad concept of 'transfer of training' — "the improvement of one mental or motor function, by the systematic training of another allied function" (Drever 1964) — has a long history in psychology. However, its association with the now largely discredited behaviourist school of psychology and with a rather mechanical kind of contrastive analysis — for which Lado (1957) cannot be held entirely responsible (cf. Abbott 1983) — led some applied linguists to doubt its usefulness in explaining second language acquisition. The questions about language transfer raised by Selinker (1969) were largely forgotten in the controversy generated by research linking first and second language acquisition (e.g. Dulay and Burt 1973, 1974). An alternative to contrastive analysis emerged; this was a cognitively-based theory known as the 'L2 = L1 hypothesis'. The processes of second language acquisition were claimed to be analogous to those of first language acquisition; transfer could therefore not be considered a significant factor in second language learning.

However it has proved rather difficult to do away with the concept of transfer altogether, even if it has had to be redefined and even relabelled. Previous knowledge clearly plays a key role in learning, as the cognitive psychologist Ausubel, quoted approvingly by Marton (1981: 172), states unequivocally: "The most important factor influencing learning is what the learner already knows." This previous knowledge includes not only the learner's knowledge of his L1 but of other languages he has learned, as well as his ideas about the new language and the knowledge of it he has acquired so far. One should also not exclude his wider pragmatic knowledge of the world (cf. Klein 1986: 114) as this may influence both his input and intake.

In recent years, transfer has been examined from an increasing number of perspectives (Gass 1988b). What seems to have emerged as a consensus (cf. Gass and Selinker 1983; Kellerman and Sharwood Smith 1986; Dechert and Raupach 1989b; Odlin 1989) is that transfer can no longer be seen as a monolithic phenomenon.

> One may question whether there is only one process called 'transfer'. What is reflected at the surface as items transferred from one language to another may actually be due to several different phenomena which relate to the processing of linguistic and non-linguistic information in the human mind, the interaction between controlled and automatic processes, gaps in the information stored in memory, various types of formal or message reduction..., and the effects of language teaching. (Sajavaara 1986: 67)

Therefore whether transfer is best seen as part of a system of strategies in L2 use which are specific to some learner types (Meisel 1983) or, as Schachter (1983) prefers, one of the constraints on the types of hypotheses a learner can formulate about the target language (and these are just two out of many formulations), may be less important than the realization that it is multi-faceted and that, as Corder reminds us:

> the part played by the mother tongue in the acquisition of a second language is a good deal more pervasive and subtle than has been traditionally believed. (Corder 1983: 95)

Transfer is not simply "a cognitive mechanism involving many factors" (Gass 1984) but a much more general principle of cognition. In fact, the concept of transfer should rather be seen as a compelling metaphor of linguistic interaction that "must be discussed in terms of other metaphorical concepts denoting language interaction" (Dechert and Raupach 1989a: xiii)[9]. The language transfer metaphor can be linked with the widespread metalinguistic 'conduit' metaphor (Reddy 1979)[10], exemplified in expressions such as *the flow of ideas, channels of communication* or *the news leaked out.* For although nothing is really transferred, there may be some sense in setting up a model in which the patterns and forms linked to one language (or to one area of language) are 'carried over' to another language (or to other areas of language).

As Lado put it (in broader terms than he is often given credit for),

> individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture - both productively when attempting to speak the language and act in the culture, and receptively

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[9] Kellerman's adoption of the term *crosslinguistic influence* (cf. Kellerman and Sharwood Smith 1986) can be seen to have been motivated by considerations such as these.

[10] cf. Lakoff and Johnson (1980), referred to in the discussion of cognitive semantics in Chapter Two.

> when attempting to grasp and understand the language and culture as practised by the natives. (Lado 1957: 2)

Nevertheless, that precise statement of the Contrastive Analysis Hypothesis has proved too powerful to account for all the data produced by second language learners. Transfer does not always occur where it is predicted on the basis of L1-L2 dissimilarity and it is clear that other processes are also at work, such as overgeneralization and simplification (Schumann 1978).The work of Dulay and Burt, for example, suggested that many of the second language learner's errors could be described as developmental, being found in both first and second language acquisition.

Taking a broader definition of transfer as the use of first (or other) language information in the acquisition of a second (or additional) language, it is possible to see it at work in a number of ways that were difficult to detect within the framework of earlier transfer studies (Gass 1988b):

- variation in the 'normal' developmental sequence
- delayed rule restructuring
- transfer of typological organization
- different paths of acquisition
- avoidance
- overproduction of certain elements
- differential effect of socially prestigious forms

Kohn (1986) makes a useful differentiation of three levels in the analysis of transfer. *Transfer potential* refers to the preconditions for the occurrence of transfer which contrastive analysis seeks to uncover. *Transfer pattern* is the actual linguistic shape of the product of transfer - the data of error analysis. *Transfer as process* is more difficult to grasp as it can only be observed through transfer patterns and, as Kohn points out, there is no easy way of deciding which process — transfer, overgeneralization, simplification etc. — is responsible for the learner's output. Moreover, although transfer may be evident in the learner's linguistic knowledge, the occurrence of transfer in the learner's use of that knowledge, i.e. his output, depends crucially on performance conditions, which include affective factors (fatigue, confidence) as well as cognitive factors (attention, practice). Jordens (1986) has shown that some errors in both first and second language speakers may be based on similar performance-related procedures.

Faerch and Kasper (1986, 1989) have stressed the importance of the degree of conscious attention in transfer procedures in speech production. Using a threeway distinction between focal attention, subsidiary attention and unattended speech, they have characterized three types of transfer: *strategic transfer* (which is largely lexical and takes such forms as borrowing (Ringbom 1983), foreignizing (making an L1 item sound like an L2 form) and literal translation), *subsidiary transfer* and *automatic transfer*. Bialystok (1990), however, believes that consciousness (i.e. conscious awareness) is not criterial in language processing, which in her terms is made up of two interdependent components - analysis of linguistic knowledge and control of linguistic processing; consciousness is, rather, an emergent property of higher levels of analysis.

However we decide to view the nature of transfer, the extent of first language influence is clearly going to be dependent on a great many interrelated variables, which make up a complex network of factors generally relevant to second language learning (Ringbom 1987). It is not possible to do more than briefly mention some of them here. One, the learner's perception of language distance, will come up in the discussion of Kellerman's work below. Another is the interaction between receptive and productive skills in the learning process. As we have already noted, both Ringbom (1987) and Meara (1990) have suggested that some lexical knowledge may be accessible only for receptive use, needing an external stimulus to be activated. Swain (1983, cited in Ellis 1985) has shown how output contributes to learning (*pace* Krashen 1981 etc.) by forcing the learner to use communication strategies, to focus on form and to test out hypotheses about the L2.

The role of the first language is likely to be more crucial in the earlier stages of learning (Seliger 1978; Taylor 1975; Dommergues and Lane 1976). The learner's individual characteristics, style of learning and knowledge of other languages will also be relevant to his use of transfer. Age is a factor: adults make more use of the L1 than children (McLaughlin 1978, Krashen 1983); and so is mode of learning: there is more evidence of transfer in a foreign language learning situation — i.e. a classroom — than in a second language acquisition environment (Marton 1973; Tarone 1979; Meisel 1983). Finally, there is type of output; Ringbom (1987) suggests that elicited utterances are more likely to show cross-linguistic influence than spontaneous utterances; this is particularly relevant when considering research methodology (see Chapter Five).

There is little doubt, then, that transfer has to be recognized as a feature of second language learning. We now turn our attention to the more specific question of lexical transfer.

1.4.1 Transfer in interlanguage lexis

It may be difficult to draw a strict dividing line between linguistic categories in discussing transfer. The present study has been described as lexico-semantic to allow for this possibility. The absence of a clear boundary is also evident in some of the work discussed in this section, which will deal with transferability and semantic transfer as well as more specifically lexical studies.

We begin by looking at transferability. According to Ard and Homburg (1983) we can say where the first language will have an effect but not where it will not. However, Adjémian (1983) maintains that we cannot predict, even probabilistically, when transfer will occur, because it is always complicated by the effects of affective variables, perceived language distance and linguistic universals.

Kellerman has done a good deal of work on this question (Kellerman 1978, 1979, 1983). In one study Dutch learners of English were asked if a number of Dutch sentences containing the equivalent of 'break' would translate directly into English and the results suggested that learners tend to transfer 'core meanings' but avoid transferring more peripheral meanings. Kellerman argued that this was because of the universality of the concepts underlying the core meanings.

Kellerman has also claimed that the learner's 'psychotypology'—his perception of language distance or the degree of relatedness between languages —plays an important part in determining the amount of conscious transfer that takes place, together with the learner's perception of the extent to which a feature of his L1 is psycholinguistically 'marked', i.e. irregular, infrequent or otherwise exceptional. He suggests that learners tend to observe a 'reasonable entity principle' by making their IL as systematic and logical as they can and that this acts as a kind of filter on those L1 structures that could be transferred. Learners will therefore attempt to keep their interlanguage semantically transparent and will thus not only make use of lexical simplification strategies (see 1.3.1 above) but also use 'iconic' elaboration (such as overuse of the past progressive tense as an icon of duration). The nature of this elaboration will depend partly on the psychotypological factor mentioned above and also the

actual degree of lexical motivation in both L1 and L2. None of these hypotheses has, however, been empirically tested.

Some of Kellerman's suggestions have been taken up by Tanaka and Abe (1985), who also make use of prototype theory and develop ideas first put forward by Tanaka (1983) and Takahashi (1984). They have proposed a detailed model of lexico-semantic development in adult L2 learners, in which the pervasiveness and persistence of transfer is constrained by conditions of prototypicality and specific exemplariness in order to account for over- and under-extensions.

The nature of the influence of the first language on the learner's semantic structure has received growing attention in recent years. Strick (1980) used the similarity ratings of terms of address such as *Sir, Dr., Mary* and *you* by native English speakers and Iranian speakers of English for a comparative study of adult semantic structure. His results support the hypothesis that semantic development in a second language is a gradual process of transition from native to second language semantic structures. This occurs "as a function of the changing cultural orientation of the second language learner" and resembles the process of first language semantic development both in its continual restructuring of categories and in its progression from perceptual to abstract representation.

Meara's use of word association tests to investigate the second language lexicon was referred to earlier (1.3.2). The restricted word association test developed by Riegel (Riegel 1968, Riegel and Zivian 1972), in which categories such as superordinate, function and quality are used to constrain responses, was employed by Ramsey (1981) in an interlingual study with English, Castilian and Catalan native speakers. Ramsey found that the Castilian and Catalan ESL speakers gave responses which resembled the semantic structure of their L1 more than that of English.

In another study, based on the interpretation of English spatial prepositions, Ijaz (1986) found that advanced L2 learners consistently favoured lexical/semantic structures that had close equivalents in their native language. The learners were essentially relying on a *semantic equivalence hypothesis* which ignores cross-linguistic differences. They found it more difficult to learn new concepts than to restructure existing ones, as Zobl (1984) had also discovered for grammatical acquisition. Generally, native language conceptual patterns appeared to be a powerful determinant of the meaning ascribed to the

L2 and these patterns were "very rigid and difficult to permeate". Conceptual complexity may also be a factor influencing the order of second language lexical acquisition (Ijaz 1984).

The importance of the work of Ijaz and that of d'Anglejan and Tucker (1973) as well as Bates and McWhinney (1981) has been to show that L1 constraints may influence the learner's conceptual patterns and semantic, pragmatic and perceptual strategies without becoming easily apparent in linguistic usage. Therefore lexical errors alone are not a reliable indicator of L1 influence. The strategy of avoidance must also be taken into consideration (Schachter 1974; Palmberg 1983).

Hudson (1989) made use of Jackendoff's preference rule system (Jackendoff 1983) in a study of L2 semantics. He suggests that an L2 speaker may use many words correctly but still have incomplete lexical entries for them. Instead of building up his incomplete entries by reference to specific criteria induced from the exemplars of a word (as the L1 learner does, at least in the early stages), the L2 learner will simply deduce that an L2 word belongs to an already established category based on the L1.

The organization of the semantics of spatial relations was one of the topics studied in the European Science Foundation's project on the 'natural' acquisition of five European languages by speakers of six other first languages (reported in Dittmar 1988: 62). It was found that, while the learner's access to locomotion reference is guided by the target language's characteristic encoding procedures, at a semantic micro-level first language influence could well intervene. This is directly relevant to the theme of this research.

The influence of the L1 on the acquisition of lexical boundaries in the L2 received confirmatory evidence in an experiment by Graham and Belnap (1986). Using a technique similar to that of Labov (1973), they asked English native speakers and Spanish ESL speakers to name sets of objects which varied along particular dimensions. The responses in the ESL data were much closer to those of Spanish than to the English ones.

Giacobbe and Cammarota (1986) studied the role of the L1 in the interlanguage lexis of two adult Spanish learners of French. They found divergent uses of L1 knowledge in their subjects: one made a systematic use of this knowledge to progress rapidly, the other was not systematic and had more difficulty. At least in the case of two related languages, then, the use of the L1 can promote lexical acquisition.

In another study which has some relevance to the present one in its partial focus on verbs of motion, Harley and King (1989) found that French immersion students in Canada failed to use those verb types that had no direct or common translation equivalents in English. Using data from the same study, Harley (1989) also found some evidence that these students made substantially less use than native speakers of common French verbs expressing both motion and path and preferred to express direction in an English way using a prepositional phrase.[11] This did not necessarily result in outright errors. Harley and King concluded that the immersion students "were making as much, or considerably more, use of... verbs of motion which have direct translation equivalents and which in general can be fitted more readily into semantic and syntactic frames that are common in English" (Harley and King 1989: 426). The use of translation equivalents is of course facilitated by the existence of numerous cognates in the two languages.

1.4.2 Conclusion

There is therefore a solid research foundation documenting first language influence on second language lexis. But apart from Kellerman and Tanaka & Abe, there has been little overall theorizing. We have seen that first language influence is sometimes difficult to detect and can manifest itself in quite subtle ways. There are clearly differences related to individual characteristics (Giacobbe and Cammarota 1986) as well as to mode of learning (Harley and King 1989). Any investigation of interlanguage lexis needs to take account of these points.

Finally, we should remember that cross-linguistic influence is just one of several factors operating on second language vocabulary acquisition (Schlyter and Viberg 1985). Some of the other possible factors are:

- general constraints on information processing
- the communicative importance of target words
- the input frequency of target words
- the formal complexity of target words.

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[11] Harley's study refers to Talmy's work on the lexicalization of motion (discussed in Chapter Three of this work) and makes some use of it in her analysis, unlike Schlyter (1984) in her study of the acquisition of French motion verbs by Swedish adult learners.

A great deal more research in this area is needed before we can claim to understand how all the various factors interact in the formation of a learner's lexicon.

CHAPTER TWO

LINGUISTIC APPROACHES TO THE LEXICON

In the first part of the previous chapter we focused on the second component of this work's title—(a study of) *the lexis* of locomotion—by looking at the general concept of a mental lexicon as a store of knowledge which an individual has of words and their meanings. We saw that this store may also contain information about the syntactic properties of lexical items that is used in grammatical encoding.

We now need to look at the theoretical aspects of the lexicon—lexis as viewed by linguists—before we go on to detailed consideration (in Chapter Three) of the particular area of the lexicon which was selected for this study. Two rather different viewpoints on lexical semantics will be presented under the general headings of structural and cognitive semantics. I shall try to demonstrate that the cognitive approach is best suited to our purposes, although insights that can be derived from the structural approach need not be rigorously excluded.

2.1 Lexis in linguistics

The status of lexis as a proper level of linguistic description was stressed by, among others, Firth (1935) and Halliday (1966), but over the last half century it has tended to be submerged within a wider framework in which syntax has had primacy. The formal study of word structure and that of word meanings have gone their separate ways as the two fields of morphology and semantics. The study of lexis as such — lexicology — has not really emerged as a clearly defined discipline in the English-speaking world (Stern 1986: 131), although it is a well-established tradition in continental European linguistics. Lexicography — the theory and practice of dictionary-making — is of course another matter.

However, lexis is once again receiving considerable attention from linguists: the lexicon is now seen to play a dynamic role in syntax instead of being regarded as a mere appendix (cf. Bloomfield 1935, cited in 2.2 below), thereby paralleling the increased importance of the lexicon in psycholinguistics,

demonstrated in models like that of Levelt. Thus in Chomsky's concept of Universal Grammar, usually referred to as the Government/Binding theory, syntax and the lexicon are integrated in the Projection Principle, according to which the properties of lexical entries 'project' on to the syntax of the sentence (cf. Cook 1988). Perhaps "the time of the lexicon has set in" (Hakulinen, quoted in Bauer 1983: 1).

As this study will require us to look at lexico-semantic systems in different languages, we shall concentrate in this chapter on semantics, while trying not to ignore the wider linguistic perspective. Semantics in general can be seen as a bridge discipline between linguistics and philosophy (Kempson 1977) or, in slightly different terms, as a convergence of disciplines, in particular philosophy, cognitive psychology and linguistics (Leech 1981). However, we shall be specifically concerned with lexical semantics — that branch of semantics which deals with the meanings of words.

One possible interpretation of the history of lexical semantics is to see it as an oscillation between 'subjectivist' and 'objectivist' approaches (Geeraerts 1988). Lexical semantics first emerged as a distinct discipline (rather than just a branch of speculative philosophy or of rhetoric) in the late nineteenth century. Bréal's *Essai de sémantique* (Bréal 1897) may be taken as a representative text of 'historical-philological semantics'. As the label suggests, there was a strong historical and interpretive orientation in this early version of lexical semantics. But there was usually a psychological aspect too, well exemplified in the following remark: "Le langage est une traduction de la réalité, une transposition où les objets figurent déjà généralisés et classifiés par le travail de la pensée" (Bréal 1897: 275).

Structural Semantics, which held sway from the 1930s to the mid-seventies, represents a reaction against the subjectivism of this earlier form of semantics. The term covers a wide range of approaches but what unifies them is the assumption that language is an autonomous structure or an autonomous set of structures (Geeraerts 1988). Each of the main approaches focuses on a different type of semantic structure, giving each one a distinct methodological perspective. Thus the axiomatic approach is concerned with the hierarchical and contrastive relationships between items in semantic fields, such as hyponymy and synonymy, i.e. word *sense* (cf. Lyons 1977), whereas the componential approach concentrates on the distinctive features that go to make up items in these fields, i.e. word *denotation* (Lyons 1977). A third approach

directs its attention at the type of structure found in syntagmatic selectional restrictions, i.e. the *collocations* of words in discourse. These approaches will be discussed more fully in the second part of the chapter.

In Geeraert's view, transformational semantics, whether of the generative or interpretive kind, should be regarded as the culmination of Structural Semantics. Thus, a representative text such as Katz (1972) assumes the basic structuralist tenet that meaning is primarily a linguistic phenomenon and it incorporates all three types of relations mentioned above within the bounds of lexical semantics. These relations include all that is linguistically relevant about meaning; everything else is regarded as 'encyclopaedic knowledge'. Despite this restriction

> the growing importance given to semantic factors within the transformational framework runs parallel with a move away from the original idea of linguistic autonomy. (Geeraerts 1988: 669–670)

This foreshadows the primacy accorded to meaning in Cognitive Semantics.

In some ways Cognitive Semantics represents a return to the psychological concerns of historical-philological Semantics. Lakoff characterizes its raison d'être thus:

> After a generation of research in which it was implicitly assumed that language could be described on its own terms, it has become more interesting to ask how much of the structure of language is determined by the fact that people have bodies with perceptual mechanisms and memory and processing capabilities and limitations, by the fact that people have to make sense of the world using limited resources, and by the fact that people live in social groups and have to communicate with each other. (Lakoff 1982: 155)

Cognitive Semantics has been able to benefit from the enormous amount of psychological and other related research that has been conducted in the last fifty years. Although its approach is basically synchronic, in contrast to the diachronic approach of Historical-Philological Semantics, the prototypical view of natural categories that is one of its key elements implies that "what appears as diachronic change from one point of view, is merely the realization of synchronically available possibilities from another" (Geeraerts 1988: 680–1).

Cognitive Semantics will be treated more fully in the third main section of this chapter.

2.2 Structural Semantics

Many structural linguists, particularly in America, took the view that "the lexicon is really an appendix of the grammar, a list of basic irregularities"

(Bloomfield 1935: 274). These linguists also held that the semantic description of linguistic forms was not a proper concern of linguistics. But other structural linguists (especially European ones) who accepted the feasibility of a semantic description propounded a linguistically autonomous lexical semantic structure. Furthermore, although not all of them actually make explicit use of semantic fields, some kind of field analysis underlies their theories.

> The words of a language can be classified into sets which are related to conceptual fields and divide up the semantic space or semantic domain in certain ways. (Lehrer 1974: 15)

In what could be called the classical view of fields Ullmann (1963) defines them as

> highly organized and integrated conceptual spheres whose elements mutually delimit each other and derive their significance from the system as a whole. In each field a sphere of experience is analysed, divided up, and classified in a unique way which embodies a scale of values and a peculiar vision of the world. (Ullmann 1963: 250)

This might seem to be a good way of characterizing the kind of lexical area this study is concerned with. We shall therefore look a little more closely at semantic field theories before examining the three structural approaches listed above.

2.2.1 Field theories

Field theories originated almost simultaneously in the work of early twentieth century German linguists and American anthropologists. Despite the bias of some structural linguists mentioned above, these theories can be linked to the development of Saussurean structuralism in linguistics (Lyons 1977). The notion of field was also influenced by its use in Gestalt psychology, which in turn arose from the fields of modern physics (Ohman 1953). The term *Bedeutungsfeld* (semantic field) was apparently introduced by Ipsen in 1924 to mean a group of words that form some kind of semantic unity; he used it with reference to the Indo-European vocabulary for sheep and sheep raising.

The first major exponent of field theory, Jost Trier, distinguished two parallel types of field: a lexical field (*Wortfeld*) and the conceptual field (*Begriffsfeld*) of which it is the outward manifestation. The lexical field is formed by a word and its conceptual cognates and corresponds to the entirety of the conceptual field, which is divided into parts by the 'word mosaic' of the lexical field. Continuing the mosaic analogy we can say that a word on its own has no meaning but acquires one only through opposition between it and neighbouring words in the pattern. It is only by recognising the boundaries of

each single section of the word mosaic that the content of each single word belonging to a total conceptual field becomes clear. Lexical as well as conceptual fields can be envisaged as joining together to form fields of a higher order, until finally the whole vocabulary is included (Ohman 1953).

Some contemporary cognitive psychologists (e.g. Collins and Loftus 1975) also make a distinction between the lexical network, mainly organized on the basis of phonemic similarity, and the conceptual network, organized on the basis of semantic similarity (cf. the lemma and form components in Levelt's model described in 1.1.1). Trier went further than this, however, in proposing a complete parallelism between semantic ranges and word fields (cf. Vassilyev 1974). Ullmann makes a similar assumption in the definition quoted earlier. This raises the whole issue of the relationship between language and thought and the validity of the Sapir-Whorf hypothesis (Lehrer 1974: 17; Miller and Johnson-Laird 1976: 238–239; cf. Miller 1968).

Even if Trier's work does not quite represent the 'Copernican revolution' in semantics that Ullmann (1957: 160) saw in it, it has certainly had considerable influence. The concept of a semantic field has come to be widely accepted. Two basic tendencies have emerged in the treatment of fields (Vassilyev 1974). Some linguists, like Weisgerber, followed Trier's lead in studying paradigmatic fields, while others, like Porzig, studied syntagmatic relationships (Lyons 1977: 261–266). It is also possible to set up a complex type of field, combining paradigmatic and syntagmatic relations.

Nevertheless there are many problems in the linguistic characterization of lexico-semantic fields, such as one we might set up for locomotion, even if their psychological reality has been to some extent confirmed (see 1.1.3 above). The differences in terminology often reflect fundamental differences in approach. 'Semantic fields', 'semantic domains' (Nida 1975), 'lexical fields', 'lexical configurations' (Cruse 1986) and 'word fields' do not exhaust the possible labels. The selection and labelling of fields often seem to be arbitrary and subjective. Alternative classifications may look equally plausible. It would indeed appear that there are several valid ways of looking at semantic structures. Furthermore, some field theorists, like Trier, have undoubtedly exaggerated the neatness of their systems. Unfortunately the human brain is far from tidy in its ways (see Marin's comments in 1.1) and in the lexicon, as

elsewhere, 'fuzzy edges', vagueness and ambiguity proliferate (cf. Lakoff 1972, Labov 1973, Lehrer 1985).[1]

2.2.2 Field relationships: the axiomatic approach

A fundamental assumption of classical field theory is, as we have seen, that the meaning of a lexical item is a function of its meaning relations with other items in the same field. One way of looking at these field relationships was suggested by Miller and Johnson-Laird (1976). They make a distinction between hierarchical and contrastive field properties:

> We can think of hierarchical relations as characterizing the external relations of a contrastive set — how one set of contrastive sets is related to other sets — and of the dimensions of contrast within the set as characterizing the internal structure. The hierarchical field property, based on external relations between contrastive sets, reflects the way labels include one another; the contrastive field property, based on internal relations among members of a contrastive set, reflects the way labels exclude one another. (Miller and Johnson-Laird 1976: 266)

All these relations are treated in the axiomatic approach to Structural Semantics, which in formal descriptive terms is derived from logic (the second main approach, componential analysis, will be discussed in the next sub-section). Under the two headings of Miller and Johnson-Laird, we can list some of the detailed, often quite subtle, distinctions that have been made among the relations, especially by Cruse (1986); they will be referred to again in the discussion of locomotion in the next chapter:

HIERARCHICAL FIELD RELATIONS

Locative inclusion (Miller and Johnson-Laird's most 'primitive' type)
e.g. *The boss is in his office*

Part-whole type ('meronymy' in Cruse 1986)
e.g. *Hitler had only one testicle*

Class inclusion (hyponymy; with its sub-type—taxonymy)
e.g. *Oranges are not the only fruit*)

CONTRASTIVE FIELD RELATIONS

Antonymy (in Lyons' restricted sense of gradable opposition; Cruse distinguishes three types and one sub-type: polar, overlapping — including the privative sub-type, and equipollent) e.g. *long : short, fast : slow, easy : difficult, hot : cold*

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[1] It is interesting to see that a semantic field approach has been promoted in second language teaching as a way of expanding passive vocabulary (Crow and Quigley 1985; see also Anthony 1975, Cornu 1979, Godman 1982, Mansouri 1985). However, Nation (1990) warns of the dangers of an uncritical use of this method.

Reversives (motion or change in opposite directions – Cruse)
e.g. *rise : fall, advance : retreat, enter : leave*

Complementarity e.g. *true : false, dead : alive, open : shut*

Converseness e.g. *above : below, in front of : behind*

Incompatibility e.g. *male : female*
also multiple systems like the seasons or playing card suits

It will be noticed that this analysis does not allow for the relation of synonymy, unless it is seen as some kind of symmetrical hyponymy (Lyons 1977). Miller and Johnson-Laird play down the importance of synonymy, as does Lyons, who nevertheless devotes several pages to a discussion of it. Cruse notes that, on the scale of synonymity, absolute synonyms, "if they exist at all, are extremely uncommon",[2] while zero synonymity is not a unitary concept (Cruse 1986: 268). He also shows that it is possible to speak of 'micro-relations' of contrast between synonyms, e.g. micro-incompatibility (*execute : murder*) or micro-hyponymy (*fearless : brave*)[3].

A somewhat different classification of semantic relations which also excludes synonymy is that of Stachowiak (cited in Erdmenger 1985), who envisages three main types: binary oppositions (roughly corresponding to contrastive relations), non-binary contrasts (roughly corresponding to hierarchical relations) and a novel type of situative-referential relations, which include as sub-types instrument and function (e.g. *key : door opening*), spatial contiguity (e.g. *glasses : eyes*) and action and outcome (e.g. *speak : discussion*).

2.2.3 Componential analysis

The second main approach to Structural Semantics is decompositional in nature. Componential analysis is a technique for describing interrelationships of meaning by breaking down each concept into minimal components or feature, which are distinctive in terms of a semantic opposition or dimension of contrast. So 'woman' can be defined by the features +HUMAN +ADULT –MALE in such a way as to distinguish it from the related concepts 'girl', 'man', 'child', 'cow' etc. It is claimed that componential definitions enable us

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[2] See the discussion (and references) in 1.1.4, where it was assumed that there are no real synonyms in a language.

[3] Whatever view theoretical linguists may take of it, there is no doubt about the problems closeness of meaning can cause the second language learner, and this applies particularly at an advanced level (Martin 1984).

to characterize the lexical relations listed in the previous section, such as class inclusion (hyponymy) (e.g. *dog* : *animal*) or the contrastive relation of incompatibility (e.g. *dog* : *cat*) as well as the more traditional notions of synonymy and polysemy (Leech 1981). This kind of binary analysis did not originate in semantics; it had been developed in the quite disparate fields of anthropology and phonology, before Katz and Fodor (1963) applied it to semantics.

Nida (1975) distinguishes between analytical and psychological validity in components of meaning (a distinction which can be seen in other areas of language, e.g. phonology); for instance, English speakers tend to describe the principal difference between the meanings of *run* and *walk* as being speed, but if pressed with instances such as running on the spot, they will accept the more precise distinction as whether at least one foot is touching the ground. "What is psychologically focal is not always analytically crucial" (Nida 1975: 21; cf. the discussion of locomotion in 3.2.1).

Componential analysis does seem to involve certain aspects of field theory, for instance, the necessity of looking at a set of words in a carefully delimited area which have basic semantic features in common but with differentially contrasting meanings (e.g. Bendix 1966, Nida 1975). However, some have denied that there is a necessary connection between lexical field analysis and the conventional method of componential analysis (Lyons 1977: 326; cf. also Lutzeier 1983).

While there is no doubt that, used with care, componential analysis can be an extremely useful tool,[4] serious objections have been raised against it (e.g. Lyons 1977, 317–335; Tyler 1978; Pulman 1983; Sperber and Wilson 1986). The atomization of meaning inherent in componential analysis has been attacked by Bolinger (1965) and Sampson (1979).

Firstly, there seems to be no theoretical limit to the process of subclassification. If "there exists a universal set of semantic features of which every language possesses a subset" (Leech 1981: 232), then attempts to identify semantic primitives, even as thoroughgoing as that of Miller and Johnson-Laird (1976) or of Wierzbicka (1980), have failed to come up with completely convincing lists.

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[4] A modified form of componential analysis has been used, together with collocational grids, in a popular vocabulary textbook (Rudzka *et al.* 1981, 1985; cf. Channell 1981).

Secondly, there is the problem of defining the contrastive units, since in some words, contrasts can occur simultaneously on more than one dimension (for example, with 'woman'). The lack of a metalanguage to describe some components is admitted by Nida.

Thirdly, there is no self-evident way of showing that some senses are more important than others. Even if we could establish core meanings on the basis of frequency, we still face the difficulty that the centrality of a feature is determined by context.

Finally (though this does not exhaust the criticisms), it must be remembered that

> semantic structure is not just a static list of words and their features exhaustively represented in the mind; it is instead a dynamic relation of propositions which not only makes explicit information already implicit in these propositions, but creates new information through metaphor and analogy. (Tyler 1978: 205)

Leech (1981) defends componential analysis on the grounds that it is a theory of linguistic meaning, not of reference. However, this raises the question of whether it is possible to arrive at a semantic interpretation which does not involve knowledge of the world (Tyler 1978: 203; cf. Johnson-Laird 1981).

Nevertheless, it seems very difficult to carry out contrastive lexical analysis without making use of semantic features of some kind — "as problem-ridden in theory as [they are] indispensable in practice" comments Cruse (1986: 22),[5] who prefers the term 'semantic traits' (which can be classified as criterial, expected, possible, unexpected, excluded or canonical). We shall find that it is in fact helpful to talk of semantic features in our discussion of the lexis of locomotion.

If componential analysis is seen as exemplifying the decompositionalist trend in the treatment of word meanings, it may be contrasted with a 'holistic' trend, which sees lexical meaning as indivisible (cf. Carston 1985; also Wildgen 1985). The former approach is typified by Katz, Leech (especially in his earlier work) and by Miller and Johnson-Laird (1976). The latter approach is typified by Fodor and by Sperber and Wilson (1986). 'Classical' field theory might also be described as another kind of holistic approach (Lutzeier 1983).

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[5]In his attempt, as he puts it, to "lighten the burden of theory" on his term, Cruse seems to be moving away from 'classical' componential analysis.

Leech (1981) attempts a compromise position by distinguishing three different levels at which word meaning may be analysed. At the first level the word-sense as an entirety may be seen as a conceptual unit in its own right: a 'prepackaged experience', as Leech puts it. Holistic theorists would not in principle go any further; to them, the meaning of most, if not all, words is an 'irreducible concept' (Sperber and Wilson 1986: 91). However Leech allows for a second level at which the conceptual unit may be divided into components or features by componential analysis. Finally both word-senses and features can be broken down into 'fuzzy sets' of attributes (Leech 1981: 121); this has some affinities with the 'encyclopaedic entry' in memory postulated by Sperber and Wilson (1986). Leech uses the analogy of chemistry to illustrate his point that componential analysis is "not the whole story". He concedes that "word meanings, like molecules, have 'emergent' properties, which are not predictable from the properties of their constituents" (1981: 122). There is clearly some value in this compromise position, which moves some way in the direction of Cognitive Semantics.

2.2.4 The syntagmatic approach

A complete analysis of lexical fields cannot be achieved without a study of selection restrictions, which belong to the syntagmatic axis. This forms the basis of a third approach to Structural Semantics; for the sake of completeness, it will be briefly described here.

According to Miller and Johnson-Laird (1976), there is a close relationship between hierarchical or contrastive relations and co-occurence restrictions. Lehrer (1974) distinguishes two contrasting points of view on selection restrictions, which she calls the lexical and the semantic positions. The lexical position, associated with figures such as Firth, Halliday and Sinclair, sees co-occurence restrictions as a function of particular lexical items, illustrated in Firth's remark that "one of the meanings of *night* is its collocability with *dark*, and of *dark*, of course, collocation with *night*" (Firth 1957: 196). The semantic position, whose leading exponents have been Katz and Weinreich, treats these restrictions as a function of the meaning of lexical items. Lehrer suggests that an intermediate position is more plausible:

> although constraints on word combinations are determined by their meaning..... there are still cases where certain combinations are arbitrarily restricted. (Lehrer 1974; 183)[6]

It would certainly appear that idiomatic collocations, such as *heavy smoker, keen interest, make tea* (but *do a job*), are built into the native speaker's mental lexicon (see 1.1.3), and are among the most difficult aspects of a language for learners to acquire (Marton 1977).

2.3 Cognitive Semantics

An outstanding feature of Cognitive Linguistics in general is that it is associated primarily with semantics, an area of linguistic analysis which other schools of linguistics have tended to deal with last (Taylor 1989: 222). The movement, if we can call it that, is still very much in the process of evolution and perhaps does not yet constitute a strong alternative paradigm to the dominant Chomskyan approach. There is no doubt, however, about its potential importance as can be seen from the involvement of a number of distinguished scholars on both sides of the Atlantic (Hudson 1990), including some older practitioners, such as Lakoff, Langacker and Talmy, who began their careers in generative grammar.

Geeraerts (1988) lists what he calls nine central theses of Cognitive Semantics, but points out that there is considerable variation within the basic approach and that, as prototype theory (see below) allows, not all studies within it would accept every one of his theses:

1. Lexical concepts have vague boundaries; they contain peripheral zones round clear conceptual centres and may not be definable by a single set of attributes.

2. Lexical concepts are polysemous clusters of overlapping semantic nuances.

3. There is no rigid distinction between essential and accidental attributes or between analytic statements (true by virtue of their meaning) and synthetic statements (true by virtue of the way the world is); this is a definitional consequence of 1 and 2.

4. Lexical concepts may be disjunctively defined, i.e. category membership may be based on sufficient similarity rather than identity (also a consequence of 1 and 2).

5. The attributes within (or the examples of) a category may have different degrees of salience.

6. Lexical concepts function in a flexible and analogical manner, thereby enhancing their usage potential.

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[6] Lehrer's position is compatible with a cognitive semantic view which sees linguistic categories as subject to a dialectic of convention and motivation (Taylor 1989).

7. Lexical concepts have to be studied as a proper part of human cognition at large; there is no specifically linguistic-semantic organization of knowledge.

8. There is no distinction between semantic and encyclopaedic knowledge (this follows from 7).

9. Semantic studies cannot ignore the experiential and cultural background of the language user (a further consequence of 7).

It is appropriate to begin our discussion of Cognitive Semantics with prototype theory, which underlies the first six theses, before going on to consider the wider topic of cognitive models.

2.3.1 Prototypes and basic-level categories

Categorization is fundamental to human existence. It is the way we deal with experience, by labelling its contents as various kinds of objects, actions and events. Consequently it underlies all language as well as all higher thought processes. Modern philosophers have tended to take it for granted, though it was a frequent concern of earlier philosophy, for example in the nominalist-realist debate (see also Swiggers 1988). But Wittgenstein in his later work turned his attention to it and discussed family resemblances and category membership in a way which foreshadows some aspects of Cognitive Semantics (Wittgenstein 1953). Another twentieth century philosopher anticipated prototype theory with his concept of the primary nuclear sense of a word (Austin 1961).

However, it was anthropologists and psychologists who were actually to lay the foundations of Cognitive Semantics. In the course of his work on American Indian kinship terms, Lounsbury (1964) discovered categories that were structured in terms of a focal member and a small set of general rules. Berlin and Kay (1969) analysed the colour terms of a large number of languages and found that although every person can conceptually differentiate eleven basic colour categories, not all languages make that many distinctions. However, there is a hierarchy such that if a language has only two basic colour terms, these are black and white; if it has three, they are black, white and red; if it has four, the fourth colour will be chosen from yellow, blue or green, and so on. Further refinements to the semantics of colour were added by Kay and McDaniel (1978), who used fuzzy set theory (Zadeh 1965) and neurophysiological studies to explain how the basic colour terms worked: it appears that both biological and cognitive mechanisms are needed.

Meanwhile Brown (1958, 1965) had investigated what he called the first level of categorization in child language development. This is the level of distinctive actions — a *ball* is likely to be bounced, a *cat* is likely to be petted, a *flower* to be sniffed — whereas other levels of categorization, either more or less specific, seem like "achievements of the imagination" (Brown 1965: 320). Brown's insight was supported by the anthropological studies of Berlin and his associates (summarized in Lakoff 1987). By analysing folk classifications of plants and animals, they found that there was a level of classification in the middle of the taxonomic hierarchy — corresponding to the genus — which was psychologically basic in that at that level people name and remember things more readily and generally have simpler names for them; at that level, too, things are perceived holistically as a single gestalt, without the specific details which are needed for identification at a lower level.

The boundaries of categories were investigated in Labov's studies of denotational structure (Labov 1973, 1978). He looked at the categorization of household receptacles like cups, mugs, bowls and vases. Subjects were shown line drawings of receptacles of different shapes and asked to name the objects. There was complete agreement that a receptacle with a circular cross-section tapering towards the bottom, whose maximum width was equal to the depth, and which had a handle, was called a cup. As the ratio of width to depth increased, more and more subjects called the object a bowl, but there was no clear dividing line between cup and bowl. Judgements were also affected by the removal of the handle and by asking the subjects to imagine the receptacles filled with different kinds of things. It is clear that no single attribute is essential for distinguishing one category from the other. Moreover, the attributes used in making judgements are ultimately related, not to the inherent properties of the object, but to its role within a particular culture (Taylor 1989: 41).

It was Eleanor Rosch, however, who in a series of innovative studies from the early 1970s on brought all these ideas together in a single perspective, which has come to be known as prototype theory (Rosch 1978; Mervis and Rosch 1981; for surveys see Lakoff 1987; Taylor 1989). She began by demonstrating the psychological reality of the Berlin and Kay focal colours, then extended the results to other categories, primarily categories for physical objects. Focal colours are examples of cognitive reference points or prototypes. People's judgements that certain category members are more typical than others — a green that is more 'greeny' than other greens, a bird such as a robin that is

more 'birdy' than, say, a penguin — are remarkably consistent. These judgements are prototype effects and this might suggest that categories are actually organized in our minds round central members with varying degrees of category membership. Although Rosch herself initially held this view, she later rejected it:

> Prototypes themselves do not constitute any particular model of processes, representation or learning.... To speak of a prototype at all is simply a convenient grammatical fiction; what is really referred to are judgments of degree of prototypicality.... the facts about prototypes can only constrain, but do not determine, models of representation. (Rosch 1978: 40–41)

Prototype effects are not restricted to categories denoted by nouns. Coleman and Kay (1981) report prototype effects in the extent to which statements count as instances of telling a lie. Pulman (1983) found graded membership in the categories denoted by verbs such as *look*, *kill*, *speak* and *walk*; thus *murder* was adjudged a better example of killing than *execute*, while *stride* and *pass* were better examples of walking than *stumble* and *limp*. A more abstract category — TALLNESS — was investigated by Dirven and Taylor (1988), again with similar results. There is evidence, too, that prototypicality is to be found in grammatical and phonological categories: "prototype effects permeate the very structure of language itself" (Taylor 1989: 175).

As in the anthropological studies mentioned earlier, Rosch and her associates found that the psychologically most basic level was in the middle of the taxonomic hierarchy (Rosch *et al.* 1976). Thus DOG is the basic level between the superordinate ANIMAL and the subordinate RETRIEVER. The basic level is the highest level at which category members have similarly perceived overall shapes and at which a single mental image can reflect the entire category. As we have already seen, people are fastest at identifying category members at this level. The words which label them are the shortest and most commonly used, as well as being contextually neutral (cf. Cruse 1977). They are also the first to be learned by children (and, one might speculate, by most second language learners too). Basic-level objects have a general motor program associated with them — Brown's distinctive actions — and most attributes of category membership are stored at this level.

How far is it possible to extend this basic-level characterization? Tversky and Hemenway (1984) suggest that knowledge of event categories is structured in very much the same way as knowledge of physical object categories (see

Rosch 1978). Lakoff (1987) goes further by regarding basic-level concepts as fundamental to the whole lexicon:[7]

> We have basic-level concepts not only for objects but for actions and properties as well. Actions like *running*, *walking*, *eating*, *drinking*, etc. are basic-level, whereas *moving* and *ingesting* are superordinate, while kinds of walking and drinking, say, *ambling* and *slurping* are subordinate. Similarly, *tall*, *short*, *hard*, *soft*, *heavy*, *light*, *cold*, etc. are basic-level properties, as are the basic neurophysiologically determined colors. (Lakoff 1987: 270–271)

However, it may be misleading to suggest that there is a fixed number of levels — superordinate, basic and subordinate — when in fact there are sometimes more and sometimes less (Clark 1987). Cruse (1986) maintains that most branches of taxonomic hierarchies terminate at the generic level. (For verbs there is the problem of greater context-dependency). But even if the surrounding structure is not always clear, there is no doubt about the importance of basic-level concepts.

Lakoff (1987) also stresses that, as basic-level concepts have a good deal of internal structure, they cannot be regarded as conceptual primitives. But they have the kind of structure that the human mind finds easy to process: they are easy to learn, remember and use. Lakoff suggests that it is therefore sensible to abandon the traditional concept of a primitive. However, that does not mean giving up the idea of semantic compositionality altogether: it is possible for basic-level concepts to be the building blocks of more complex concepts.

2.3.2 Cognitive models

Basic-level categories — defined by "the convergence of our gestalt perception, our capacity for bodily movement, and our ability to form rich mental images" (Lakoff 1987: 267) — form one kind of structure in preconceptual experience. But there is another kind of structure, which Lakoff and his co-worker Johnson call 'kinaesthetic image-schematic'. Image schemas are relatively simple structures that constantly recur in everyday bodily experience (Johnson 1987). Some examples of schemas are: CONTAINER, PART-WHOLE, LINK, CENTRE-PERIPHERY and SOURCE-PATH-GOAL. To illustrate the two roles image schemas can play, let us take the CONTAINER schema. This has the structural elements INTERIOR, BOUNDARY and EXTERIOR, which can be used directly in the representation of a scene:

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[7] Dixon (1971, 1982) makes a distinction between nuclear verbs (which cannot be defined in terms of other verbs) and non-nuclear verbs (which can); this may correspond to the basic and subordinate levels.

someone may be *in* a room, *entering* a building or standing *outside* it. Secondly, we metaphorically conceptualize a huge range of activities in CONTAINER terms: linguistic forms — e.g. *put ideas into words*; emotional states — e.g. *fall in love*; situations — e.g. *get into trouble*; visual field — e.g. *go out of sight*.

In the Lakoff-Johnson version of Cognitive Semantics, basic-level and image-schematic concepts together form the architecture of more or less complex cognitive models — idealized cognitive models or ICMs — which play a major role in cognition and language. These are best elucidated with examples.

The word *bachelor* was a favourite example in structural semantics of a term with multiple meanings (see Katz and Fodor 1963). In cognitive semantic terms, such meanings as 'a young male seal without a mate during the mating season' or (historically) 'a knight serving under the banner of another knight' can be regarded as motivated sense extensions. Leaving these on one side, we can see that the central meaning of an unmarried adult male only makes sense in terms of an idealized cognitive model of society in which marriage is typically monogamous and there is a typical marriageable age. The model clearly does not fit all unmarried men: it would not be appropriate for such disparate individuals as Tarzan, a Catholic priest or a partner in a long-term homosexual relationship (Fillmore 1982).

Another example, which is analysed in some detail by Lakoff (1987), is the ICM of seeing. This forms the basis of our commonsense 'folk' theory of seeing, according to which

1. You see things as they are;
2. You are aware of what you see;
3. You see what is in front of your eyes.

A number of consequences follow from these statements, such as the principle of veridicality (If you see an event, then it really happened) and the causal theory of perception (If something is in front of your eyes, you see it). However, the model does not always accurately fit our experience of seeing. Different people do see the same situation differently. We suffer optical illusions, we make mistakes in perception and sometimes fail to see what is right in front of our eyes. Nevertheless, the model works well most, if not all, of the time. "It defines what we take to be the representative cases of seeing" (Lakoff 1987: 129).

2.3.2.1 Sources of the cognitive model theory

Cognitive models thus provide a framework in which prototype effects can be accounted for. Lakoff cites four main sources for his ideas about cognitive models (which are comparable to Talmy's cognitive representations — see Talmy 1988): Fillmore's frame semantics, Lakoff's own work with Johnson on metaphor and metonymy, Langacker's cognitive grammar and Fauconnier's theory of mental spaces. It is worth looking at these sources in a little more detail.

1. The **frame semantics** of Fillmore (e.g. Fillmore 1975, 1978, 1982).

Fillmore speaks of associations between conceptual *scenes* and linguistic *frames* (while admitting that he is not completely happy with these terms). A scene—which could include standard scenarios, familiar layouts, institutional structures etc.—activates and is activated by a frame—that is, any system of linguistic choices, whether lexical or grammatical. He gives an example of a 'commercial event' scene:

> The event type is one in which one person exchanges money for some sort of goods or services received from a second person. There is a large set of words that key onto various parts and aspects of the commercial event schema. Examples are "buy", "sell", "pay", "spend", "cost", "charge", "price", "money", "change", and dozens of others. Within the set of words linked together in a 'frame' can be found many that form paradigms, contrast sets, taxonomies, and the rest; but all of them require, for their semantic specifications, a prior detailing of the nature of the associated conceptual schema. (Fillmore 1978: 165)

Fillmore's case grammar (Fillmore 1968, 1977) can be seen as an attempt to set up a universal framework of categories in terms of which it would be possible to describe a vast range of scenes — such as 'Agent', 'Instrument', 'Experiencer', 'Object', 'Location', 'Source', 'Goal' and 'Time'. As for frame theory itself, this can be linked to ideas about schemata going back at least as far as Bartlett (1932) and elaborated more recently in the work of Minsky (1975), Rumelhart (1975) and Schank and Abelson (1977).

2. Lakoff's work with Johnson on **metaphor and metonymy**.

Lakoff and Johnson (1980) showed how much of our understanding of everyday experience is structured in terms of metaphor. For example, our conventional ways of talking about arguments "presuppose a metaphor we are hardly ever conscious of", namely ARGUMENT IS WAR. When taking part in an argument, we set up positions, we attack and defend and retreat, and we end up by winning or losing. Elements from the domain of war are projected on to the abstract domain of intellectual disputation, This entails, for instance, that if

an argument is concluded by an amicable agreement, it ceases to be an argument.

3. The **cognitive grammar** of Langacker (1987).

This is an ambitious attempt to rethink the entire analytical foundations of language (see review by Hudson 1990). What is important from the point of view of cognitive models is Langacker's emphasis on the way we use 'conventional imagery' in interpreting situations. For example, *The glass is half-empty* and *The glass is half-full*, or *The roof slopes upwards* and *The roof slopes downwards* are sentences that clearly mean different things and yet have identical truth conditions; in the first pair, it is background assumptions and expectations that determine the imagery, in the second, it is perspective.

4. The **theory of mental spaces** of Fauconnier (1985).

A mental space is a medium for conceptualization and includes such types as our understanding of immediate reality, as well as of past, future or imaginary situations, and also abstract conceptual domains. Spaces may contain mental entities and may be structured by cognitive models. They are also related to other spaces by what Fauconnier calls 'connectors'. ICMs may introduce spaces; for example, a storytelling ICM introduces the mental space of the story.

2.3.3 An assessment

We have seen that the psychological orientation of Cognitive Semantics is reflected in its concern with categorization, in particular with the prototype effects investigated by Rosch and her associates. It is clear that the term prototype is itself a prototypical concept (Posner 1986). Indeed, the multiplicity of usage of the term, far from undermining the validity of the term, actually supports the principles of Cognitive Semantics (Geeraerts 1989). Prototypicality is in fact recursive (Dirven, cited in Taylor 1989: 61), in that the very attributes on which membership of a category are determined are frequently prototype categories themselves. For example, the 'skill' which Wittgenstein (1953) mentions as one of the attributes used in deciding membership of the 'games' category is itself prototypical; the skill needed in chess, for instance, is quite different from the skill needed in tennis.

Categories are often intimately bound up with specific cultural norms or practices. We have noted this in the discussion of cups/mugs and also of

bachelor. Languages divide up the world in different ways by drawing the boundaries between classes of objects differently. To take a fairly trivial example, there is no objective criterion to decide whether it is English and French which are correct in distinguishing between *snail* and *slug* (*escargot* and *limace*) or whether it is German in establishing a single category of *Schnecke* (Lipka 1988). Up to a point, then, the Sapir-Whorf hypothesis holds good.

This once again raises the whole question of meaning and the relevance of background knowledge. Cognitive and structural linguistics agree in denying that meaning exists independently of context. For the structuralist, however, the context is language internal, and involves the syntagmatic and paradigmatic relations between signs within the linguistic system. "Since sense is to be defined in terms of relationships which hold between vocabulary-items, it carries with it no presuppositions about the existence of objects outside the vocabulary of the language in question" (Lyons 1968: 427). But can we really exclude 'outside' knowledge? To take as an example the humble toothbrush:

> Surely toothbrush derives its meaning from the role of toothbrushes in dental hygiene, and not from paradigmatic contrasts with other terms in the language system [as claimed by Bickerton 1981: 230f]. The concept "toothbrush" has nothing whatever to do with the way people clean their nails, adjust their hair, or sweep their floors. (Taylor 1989: 84)

The absence of a fundamental distinction between semantic and encyclopaedic knowledge (cf. Haiman 1980) is, as we have seen, a consequence of situating the study of lexical concepts within the study of human cognition in general. A linguistic expression has a 'predicate' which 'designates' some entity in the user's total network of knowledge (Langacker 1987: 163). The predicate of a word therefore gives access to all the information we have about the word, which is not to say that it is all activated every time we use the word.

For certain purposes, it is of course possible, as Cruse (1988) argues, to make a theoretical separation between word-specific properties and conceptual structure, but from the cognitive point of view there is no independent level of semantic information that belongs to language and that is distinct from the individual's world knowledge (Geeraerts 1989: 607).

Because it takes a broader view of language and cognition, Cognitive Semantics offers a more comprehensive perspective than Structural Semantics and we shall adopt it for the rest of this work. That does not mean we have to abandon all aspects of Structural Semantics and we have already indicated

those that are relevant to this study (field relations and componential analysis). The 'classical' theory of categorization is as much a product of the human mind as prototype theory and classical categories have a significant role to play in understanding (Lakoff 1987: 160). As Labov (1978) points out, the Aristotelian conception that an object is to be known through a set of 'essential' properties, and that 'accidental' properties can be safely disregarded, does work to a surprising extent. Cognitive Semantics can therefore incorporate classical categories, provided their limitations are recognised. Componential analysis also works well up to a point. It is certainly legitimate to speak of the attributes of a category, provided one does not intend by this term the binary atomic components of the classical theory. "Attributes are simply the dimensions along which different entities are regarded as similar" (Taylor 1989: 63).

This short overview of Cognitive Semantics has not attempted to pursue all the various lines of enquiry which the cognitive approach suggests. Nor has it tried to deal with all the new terminology Cognitive Semantics has inevitably thrown up. (Langacker 1987 is particularly liberal in this regard). Although Lakoff and Johnson's interest in metaphor has been mentioned, this fertile area has not been explored (see, for example, Paprotté and Dirven 1985). However, the area of Cognitive Semantics that is of particular relevance to this study — that dealing with spatial relations and motion events— will be discussed in some detail in the next chapter.

It is appropriate to end this chapter by quoting Lakoff once more. He is referring to the overall perspective derived from the studies he reviews in his 1987 text and his words serve to define the major insights of Cognitive Semantics:

> [these studies provide evidence] that the mind is more than a mere mirror of nature or a processor of symbols, that it is not incidental to the mind that we have bodies, and that the capacity for understanding and meaningful thought goes beyond what any machine can do. (Lakoff 1987: xvii)

CHAPTER THREE

THE SEMANTIC SUB-DOMAIN OF LOCOMOTION

The semantic focus of this study is on locomotion, conceived as a sub-domain within the wider semantic domain of motion and defined in terms of this unifying concept:

> a human being moves from a point A, situated on the dry surface of the earth, to some point B, thereby employing his own physical energy to perform the locomotion.
>
> (Weniger 1974: 37)

This area was chosen because it deals with a universal aspect of experience which is probably less culture-bound than some others and is therefore more amenable to the kind of cross-linguistic/cross-cultural comparison envisaged here. We should, however, remember that no area of experience is completely culture-free and be ready to recognize cultural factors when they occur in the data. Another reason for the choice is the relative abundance of linguistic analysis devoted to this area—probably due to this very universality—which this chapter will explore. It is a particularly appropriate area in which to demonstrate the ability of Cognitive Semantics to provide a more convincing interpretation than Structural Semantics (see the previous chapter). We shall find that the perspectives opened up by the work of Talmy are particularly illuminating and his lexicalization typology will provide the analytic model used in this research.

The chapter will begin by looking at the essential semantic foundations of locomotion in spatial relations. A considerable amount of detailed work in this area has been carried out by linguists of various persuasions. This first section will review the work, with an emphasis on the more recent insights offered by Cognitive Semantics, especially those of Talmy. The second section will turn to the specific semantic elements of a motion event, which will be characterized in terms of the Source-Path-Goal cognitive schema, with Talmy's analysis once again to the fore. The final section will deal in detail with aspects of the English lexicon of locomotion, in preparation for the description in subsequent chapters of the fieldwork based on this.

3.1 Spatial relations in language

Conceptions of space, together with those of time, are of central importance in human cognition (Miller and Johnson-Laird 1976: 375, Johnson 1987: 31). It is indeed possible that

> our intellect is primarily fitted to deal with space and moves most easily in this medium. Thus language itself becomes spatialized, and in so far as reality is represented by language, reality tends to be spatialized. (Urban 1939: 186)

Hence the development of the hypothesis of localism (dating back to at least the early nineteenth century) which, in its strong version, can claim that the linguistic expression not only of time, aspect and possession but even of truth and modality is ultimately derived from spatial expressions (Lyons 1977: 724). Linguists such as Anderson (1972), Jessen (1975), Bennett (1975) and Traugott (1978) have all tried to show that the entire *temporal* system of language must be generated as locatives in a semantic base (cf.Ikegami 1984). On the other hand it has been argued that time is in some sense more fundamental than space (Givòn 1979, Langacker 1987: 149) and that the conception of time in terms of space is no more than a useful metaphorical device. Be that as it may, there is no doubt that human beings have some kind of inborn capacity for spatial representation which is probably linked to the capacity for spatial co-ordination.

While underlying neurophysiological capacities are common to the human race, there is great diversity in the way languages treat space. Thus there are no less than 88 adverbials for spatial deixis in Eskimo compared to just two in English (Denny 1978: 72); the Amerindian language Atsugewi has 50 Path/Ground 'satellites' as against the handful in English, such as *home* in *She ran home* (Talmy 1985: 107). Nevertheless, out of all the possible perceptually salient spatial relations only a small subset is actually lexicalized in any language. It is, for instance, unlikely that any language has a term meaning 'for two punctual objects to make an equilateral triangle with the observer' (Herskovits 1986: 54) though such a relation is readily grasped. The lexical system is therefore much more limited than the capacity of the human brain. The need for efficiency and economy of effort in information processing would seem to rule out more than a restricted set of possibilities. There may well be universal implicational hierarchies of semantic variables on similar lines to those proposed for basic colour terms (Berlin and Kay 1969), while cultural ecology may explain why certain specific differences arise, such as variables in the deictic spatial system. (Denny 1978).

3.1.1 The development of spatial orientation

It is plausible to assume that the conceptual core of space originates with the body concept, so that the first spatial 'relatum' which is learned is ego (Miller and Johnson-Laird 1976: 394). From this we derive our three dimensional outlook, which, in descending order of experiential as well as linguistic salience, consists of **verticality** — where *up* has positive polarity, the **front-back axis** — with *front* having positive polarity and the **left-right axis** with no clear polarity (Lyons 1977: 691). The primacy of the body concept gives a certain primitive status to what Lyons calls **the paradigm case of concrete locomotion**, generating such sentences as

Juma travels from Kisumu to Nairobi in six hours.

i.e. a first order entity moves from one physical location to another in a measurable interval of time. The special status of persons within the class of first order entities (Lyons 1977: 442) provides some theoretical justification for setting up a sub-domain of human locomotion.

The child's gradual emancipation from egocentric space (Piaget and Inhelder 1948) involves the acquisition of other perspectives which can be used alongside the egocentric orientation. Adults are able to talk about space in two distinct ways: intrinsically and deictically (Miller and Johnson-Laird 1976: 396). While possibilities for confusion do exist, languages have their own ways of indicating which system is being used.

As well as acquiring other spatial perspectives, the child develops his own cognitive map of the surrounding world, fragmented and distorted though this may be. The map may become highly elaborate, though it will inevitably reflect his socio-cultural background (cf. Gould and White 1974). Long before this stage is reached in adolescence, however, the lexical terms for spatial representation have been firmly established (Clark 1982).

3.1.2 Linguistic work on locatives

Although we are capable of partitioning space to as fine a degree as we wish with metric co-ordinates, it is important to remember that the Newtonian concept of absolute space, with its associated Euclidean geometry, has not only been superseded in modern physics but has never represented the way 'ordinary language' handles matters of space, which is relativistic (Miller and Johnson-Laird 1976: 380) and generally topological (Talmy 1983: 262; cf. Talmy 1986).

This should be kept in mind when considering the fairly extensive literature on English locative terms, which includes Gruber (1965), Fillmore (1968), Leech (1969), Bennett (1975) and Miller and Johnson-Laird (1976) as well as more recent work by Brugman (1981), Lindner (1981), Hawkins (1985), Talmy (1985) and Herskovits (1986). The earlier studies mostly employed componential analysis within a structural linguistic framework whereas later ones reflect the growing influence of Cognitive Semantics.

3.1.2.1 Leech's treatment of the semantics of place

Leech (1969) presents a taxonomy of 16 componential 'systems' or features for the semantics of place, including dimensionality, distance, partition, orientation, movement and posture. Most of these involve a binary distinction, which can be either positive-negative or pointing away-towards, e.g. +DIAG for diagonal; ↔PROX for proximity. However locomotion and posture require a list of several types, while dimensionality has a three-way distinction. In his later, briefer, treatment of the topic (Leech 1981), he shows how all the meanings of the different prepositions can be conveyed, with the help of redundancy rules, by just two features. For example, the predicate *was in front of*, which is fully defined by

↔ SPATIAL
← DIRECTION
\+ HORIZONTAL
– LATERAL

in fact only needs the specification

← DIRECTION
– LATERAL

because of the redundancy rules that ±LATERAL requires [+HORIZONTAL] and ±HORIZONTAL requires [↔SPATIAL].

3.1.2.2 The componential analysis of Bennett

In contrast to Leech, the spatial componential analysis of Bennett (1975) makes up to three distinctions for each preposition. Thus *behind* is defined as 'locative posterior place'. Although he separates locative from non-locative (directional) prepositions, Bennett proposes that all directional expressions contain a locative expression, so that *to the church* really means 'to at-the-church', and he cites an African language (Nyanja) where this is clearly lexicalized (Bennett 1975: 18). This is similar to the way Gruber (1965)

presents verbs like *climb* as optionally incorporating a prepositional meaning, in this case 'up'.

3.1.2.3 Computational formulae

Miller and Johnson-Laird (1976) were concerned with giving computational formulae for a wide range of lexical items, not just for spatial relations. They compared their method to several componential analyses of one particular preposition — *in*. Thus for Bennett, this is simply defined as 'locative interior', while for Leech *x in y* means that x is 'enclosed' or 'contained' in a 2-dimensional or 3-dimensional place y. The computational schema for this preposition is as follows:

IN (x,y): A referent x is "in" a relatum y if
(i) [PART (x,z) & INCL (z,y)]

The second line is equivalent to saying that x has the part z and that z is included spatially in y. The statement does not of course indicate how large a part of x z has to be in order to qualify but this lack of specificity, suggest the authors, is "not inappropriate" (Miller and Johnson-Laird 1976: 385).

3.1.2.4 A critique of structural views

Underlying all these descriptions of locative meaning is what Herskovits (1986) has called the **simple relations model**. This model works very well for a large number of cases and seems to provide an economical, even elegant, way of characterizing meaning. But it also yields incorrect or inadequate predictions in a fair number of other cases, as a few examples, based on those of Herskovits (1986), will show.

Why is *the museum is behind the theatre* not freely interchangeable with *the theatre is in front of the museum*? When a bird is *in the tree* it is not in the interior of the reference object as it clearly is when it is *in the oven*, but rather in the interior of the outline of that part of the tree made up of branches. We can say *the orange is in the bowl* when the orange is actually resting on top of some apples above the level of the bowl's edge. While *Florence is at the supermarket* appears to convey the same information as *Florence is in the supermarket*, we would not be likely to use the first if both speaker and addressee were actually at the supermarket. The sentence *Christopher is in the field* sounds perfectly acceptable but not *Christopher is in the football field.*

All of these admittedly rather diverse cases would, using the simple relations model, have to be explained in terms of pragmatics, which seems to stretch that elastic term rather too far. (Unless, of course, they are just swept under the carpet by calling them 'idioms'). One can only conclude that the spatial domain "remains incomprehensible when looked at in this way" (Herskovits 1986: 2). It would seem that classical semantics, or the 'objectivist' view of meaning (Lakoff and Johnson 1980; Lakoff 1987; Johnson 1987), into which the simple relations model fits, is unable to handle spatial relations in a satisfactory way and therefore needs to be supplemented, if not replaced entirely, by a Cognitive Semantic approach.

3.1.2.5 Cognitive semantic studies of prepositions

Lakoff (1987) lists a number of key studies of prepositions and particles within the framework of Cognitive Semantics, emanating from the University of California campuses at Berkeley and San Diego, of which some have already been mentioned. He gives a detailed description of, and extends, the results of Brugman's (1981) study of *over*. Among the others, Lindner (1981) looked at *up* and *out*, Hawkins (1984) provided an overview of English prepositions, while Vandeloise (1984) examined a number of French prepositions. All these studies, according to Lakoff, demonstrate that expressions such as prepositions and particles are polysemous, the senses of each forming a radial structure with a central member and links defined by image-schema transformations and metaphors (Lakoff 1987: 460).

Lakoff presents his radial structures as a special type of the family resemblance model originally put forward by Wittgenstein (1953). Cuyckens (1988) has suggested that a more general family resemblance concept serves as a better link between the senses, since there is often no single central member. He also proposes a two-level structure, the lower level stipulating the detailed senses of the expression in a family resemblance fashion, and the upper consisting of a limited number of broad covering senses that serve a categorizing function to which we relate instances when trying to understand them. For *over*, the higher level is represented by 'above and across', 'above' and 'covering' (Lakoff 1987).

3.1.3 Talmy's 'imaging systems'

We shall now step back from the detailed consideration of individual prepositions and try to take a broader view of what is involved in the linguistic

representation of space. Leonard Talmy, who has done extensive work on the relation of grammar to cognition (cf. Talmy 1983, 1986, 1991) has suggested that at least four distinct "imaging systems" are operating here. These systems organize the structuring and viewing of conceptual material and

> are relatively independent of each other in content, with each adding a distinct conceptual parameter to those of the others, but their contribution can be co-ordinated and linked, at times by individual grammatical forms. (Talmy 1986: 28)

We may wish to see these systems, as Talmy does, as each offering a range of possibilities for a speaker to choose from, or, like Fillmore, find it more helpful to think in terms of the "imposition of a conceptual framework on a piece of reality" (Fillmore 1983: 315). The four systems are: structural schematization, perspective point, distribution of attention and force dynamics.

3.1.3.1 Geometries

The first system is defined for the spatial domain as being one of **geometries** (Talmy 1983: 253). It refers to the geometric schematization of objects and their relationships to each other within different reference frames. This could also be understood as the mapping of geometric descriptions on to objects by a process of geometric imagination and accomplished by geometric description functions (Herskovits 1986: 57).[1] The basic function of Place maps spatial entities, which can range from ordinary solid objects to unbounded entities, on to regions of space of any dimensionality. Another type maps a region on to some idealization of it; for example:

The town is on the road to Nairobi.

Here the town approximates to a point and the road to a line, which Herskovits shows as part of a Contiguous function:

Contiguous(PtApprox(Place(Town))
LineApprox(Place(Road)))

The shift in dimensionality involved in this idealization is a reminder of the fact that the human mind is capable of moving freely up and down the hierarchy of dimensionality:

[0DIM] indeterminate point or node

[1DIM] line or channel

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[1] In Herskovits' analysis these geometric descriptions exist only at one first level of abstraction. At a second level of abstraction conventional use types are derived from the ideal meanings of prepositions by a process which is subject to sense shifts as well as pragmatic factors.

[2DIM] surface or area

[3DIM] medium or volume

It seems more reasonable to use this fourway conceptual distinction (cf. Hawkins 1988), which accords well with the linguistic facts, than to follow Leech (1969) and Quirk *et al.* (1972, 1985) in setting up three dimension types (i.e. 0, 1/2, 2/3) simply on the basis of the *at/on/in* distinction. Thus, conceptually, objects do not have absolutely fixed dimensionality, though one level may be taken as the canonical assignment. For example, *street* is normally conceived as three-dimensional, while *road* is two-dimensional.[2] But the following sentences are all acceptable:

The procession moved slowly through Princes Street [3DIM]

She crossed Princes Street by the traffic lights [2DIM]

The visitors strolled happily along Princes Street [1DIM]

We got off the bus at Princes Street [0DIM][3]

Talmy shows that, in addition to dimensionality, the boundedness and dividedness of objects in a spatial scene may be important in its linguistic realization. He contrasts these two sentences:

The bike stood among the boulders

The toy bike stood amidst the wheatstalks

He suggests that *among* in the first is used for the boulders viewed as a set of points, whereas *amidst* in the second is for the wheatstalks viewed as an aggregate mass. English does not, however, distinguish prepositionally between the unbounded object *fog* in *He walked through the fog* and the bounded object *stream* in *He waded through the stream*; in both cases *through* is used, but there is a difference in the verb.

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[2] There are good historical reasons for this: the word *road* developed its basic modern sense of 'a line of communication' (OED) fairly late — Shakespeare providing the earliest recorded use — since it had originated as the past tense of *ride*; meanwhile *street*, derived from the Latin *strata* referring to Roman roads — as it still does in Watling Street — developed the sense of a road with houses on either side)

[3] It is also possible to have abstract dimensionality. The following examples are best understood in terms of the Conduit metaphor we have already referred to (section 1.4; cf. Reddy 1977, Lakoff and Johnson 1980) in which Mind is a Container and Ideas are Entities:

Let's work through your plan again [3DIM]

You'll have to go over that topic again [2DIM]

It's futile to pursue that line of reasoning [1DIM]

I'd like to get back to your first point [0DIM]

An object can also have a biased geometry imputed to it. Bias arises from our spatial orientation in terms of verticality and the front-back and left-right axes which was mentioned above (3.1.1). Two kinds of bias are distinguished by Talmy, illustrated by these two conceptualizations of the same event:

Dorcas moved towards the front of the queue

Dorcas moved ahead in the queue

In the first, *towards the front* gives part of the queue—one of its ends—the status of front; in the second, *ahead* establishes the front-to-back directedness of the queue as a whole.

3.1.2.2 Perspective point

Talmy's second imaging system is defined as **perspective point**. This is

> the point within a scene at which one conceptually places one's "mental eyes" to look over the rest of the scene — and characterizes its location, distance away and mode of deployment. (Talmy 1983: 254)

Talmy illustrates the difference made by perspective with the two sentences:

There are a number of houses in the valley.

There is a house every now and then through the valley.

The first takes a long-range synoptic view, while the second is a shifting close-up view of the same scene, whose 'geometry', set by the previous system, is largely independent of these perspectival indications.

The importance for conceptual organization of these two systems which Talmy labels *geometries* and *perspective* is recognized by Zubin and Choi (1984), who, however, prefer to call them *gestalt* and *orientation*. Evidence from a cross-linguistic perceptual coding project leads them to propose this universal: that all languages will either code orientation and gestalt in separate lexical items or will have lexical items which are systematically ambiguous, presumably due to underlying conceptual constraints. Thus Korean and Mandarin, because of the pattern of their lexicalization, make a clear distinction between orientation and gestalt for the semantic feature of extension. This is not true of English, which has to make do with *long* and *wide*, leading to complex behaviour by its speakers when faced with ambiguous situations.

3.1.2.3 Distribution of attention

The third imaging system is **distribution of attention**. Given a structurally schematized scene and a vantage point from which to regard it, this system

refers to the allocation of attention which can be directed differentially over the aspects of the scene. Discourse features such as focus, topic and comment form part of this system, but of particular relevance to a spatial scene is the Figure/Ground distinction. These terms are borrowed from Gestalt psychology but given a distinct semantic interpretation, characterized by Talmy as follows:

> The Figure is a moving or conceptually moveable object whose site, path, or orientation is conceived as a variable the particular value of which is the salient issue.
> The Ground is a reference object (itself having a stationary setting within a reference frame) with respect to which the Figure's site, path, or orientation receives characterization.
> (Talmy 1983:232)

Langacker (1987)[4] points out that the Figure (which corresponds to Gruber's (1976) 'Theme') is not necessarily the focus of attention; figure/ground contrasts can be registered even in areas not being attended to. Furthermore, it is common to have hierarchies of Figure/Ground organization: one can observe a group of people against the background of a building, and then notice one's friend standing in the group, making him the new Figure, while still perceiving the group as a whole against the building.

The Ground may in fact consist of more than one reference object. The commonest secondary reference object is the directed space set up by the earth:

The department is on the south side of Buccleuch Place.

The secondary object can be wholly outside of the primary object:

There's been an accident at the Library end of the street.

However in the sentence

She's standing to the right of the lamp-post

the intrinsic right/left orientation of the speaker or hearer is extended to define the framework by which the Figure is located with respect to the primary reference object (the lamp-post).

Exactly the same kind of extension would be used by speakers of some languages, such as Hausa and many other African languages (cf. Hill 1978) to identify the Figure in sentences equivalent to

She's standing in front of the lamp-post.

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[4] Although he talks about figure/ground contrasts here, Langacker generally prefers the terms Trajector and Landmark. Some might prefer these novel terms for the lack of association with the psychology of perception which we have in Figure and Ground.

That is, the Figure would be seen as standing on the side of the lamp post furthest away from the speaker, just the opposite of the native English speaker's interpretation, where the primary reference object has a biased geometry imputed to it, derived by mirror-image reversal from the secondary object (the speaker/hearer) — the front of the lamp-post now faces the speaker.

Talmy observes that spatial elements generally characterize the Figure's geometry much more simply than the Ground's and this is due to our cognitive mode of interaction with space, in which focal attention is usually given to part of a broader field, so that our predominant concern is with the location of objects in space. However, it is possible for the elaborated geometries of Figure and Ground to be related within a spatial scene, in such ways as orientation (illustrated in *The car was parked across the entrance*), proximity (shown in *The blanket lay over the bed*) and distribution (for example, *There were stains all over his jacket*).

3.1.2.4 Force dynamics

The fourth imaging system is **force dynamics** which, given a structured scene, expresses the forces which the elements of the scene exert on each other. It includes exertion of and resistance to force, overcoming of resistance, barriers to force and their removal. Unlike the other systems, which mostly involve the visual modality, this one reflects more of the kinaesthetic modality. Concepts of the 'causative' belong to this system which, however, is more broadly based than that term implies. It would seem to play an important role in the 'root' senses of modal verbs, as well as in speech act structure (Johnson 1987; Sweetser 1990). We shall not, however, be so much concerned with force dynamics, as this study is restricted to 'simple' locomotion, excluding causative types (see section 3.3).

3.1.2.5 Parameters of a spatial scene

To sum up so far: We have seen that although languages do not lexicalize more than a small proportion of all the perceptible spatial distinctions, the semantic domain of space is of such complexity that it cannot be adequately handled by simple relations models. The four imaging systems proposed by Talmy form a starting point for a better understanding of this complexity.

Thus individual spatial expressions, such as English prepositions, can be seen as "instantiating bundles of schematic abstractions, made up of rudimentary spatial elements governed by various compositional properties"

(Talmy 1983: 258). The actual schemas may, as we have noticed, involve some kind of idealization. Most specific physical characteristics of a spatial scene are disregarded in its linguistic representation. But the particular characteristics which can be ignored may differ between languages. For English, as Talmy points out, it is irrelevant to the use of the preposition *across* whether the planar object being traversed is a liquid layer or a solid surface (Talmy 1983: 261). This would also apply to the verb *cross*. However in the Kalenjin language Tugen, spoken in the Kenyan Rift Valley, two separate verbs are used: *sir* for land surfaces and *iwer* for water (and also fire).

Apart from idealization and topological shifts, a speaker may make use of a part-for-whole designation strategy and leave the hearer to work out the complete picture from his own imaging processes and knowledge of the world. An example of this might be

His house is fifty yards down the next turning on the right

where strictly speaking *turning* specifies only the junction of the main road and side road and not the side road itself.

While alternative schemas may in theory be available for a given spatial scene, culture or language usually preselect among them. For example, in English our linguo-cultural view of a table attaches its essential geometric character to the tabletop, with the legs as incidental appendages, so a ball thrown from one person to another between the legs of a table is said to be thrown *under the table*. In Atsugewi, on the other hand, the whole table is regarded as a volume, and the ball would be said to be thrown *through the table* (Talmy 1983: 267).

As many as twenty parameters, suggests Talmy, may be relevant to the expression of spatial relationships by closed class elements such as English prepositions. Figure 3.1 is an attempt to present these parameters diagrammatically. Although we may find ourselves wondering to what extent language users are guided by these parameters in actual spontaneous discourse (Fillmore 1983: 320), this is perhaps to miss the point. Talmy seems to have uncovered some quite subtle facts about spatial meanings in language even if he does not make sufficient allowance for indeterminacy in performance.[5] They may be seen to underlie the linguistic realization of motion events, to which we turn our attention in the next section.

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[5] Herskovits was "struck by the vagueness and inconsistency of speaker's intuitions as well as the degree of individual variation [in the use of prepositions]" (Herskovits 1986: 191)

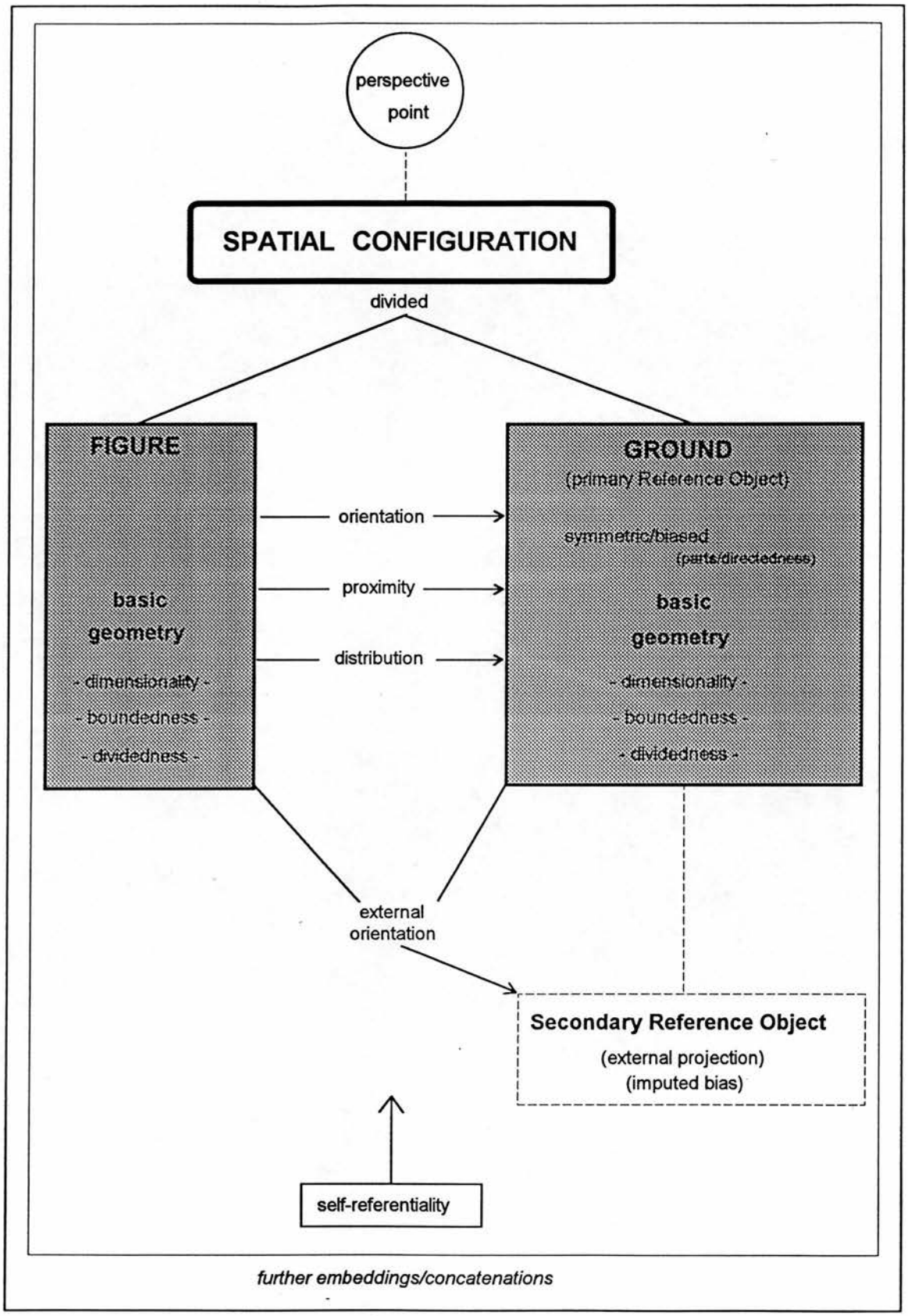


FIGURE 3.1: Spatial parameters for grammatical elements
(based on discussion in Talmy 1983)

3.2 Motion events

As we saw in Chapter Two, there are two kinds of mental structuring which are given prominence in the cognitive linguistics of Lakoff (1987) and Johnson (1987): basic-level structures and kinaesthetic image-schemas (see 2.3.2). Basic-level structures define fundamental categories of physical objects, actions and relations. Thus WALKING is a basic-level concept which arises directly from our neuro-muscular experience of it. From it we are able to derive a superordinate concept of MOVING and subordinate ones of AMBLING, HIKING, MARCHING etc. Our bodily experience also gives rise to the *SOURCE-PATH-GOAL* image-schema. This is a relatively simple structure derived from the fact that "every time we move anywhere there is a place we start from, a place we wind up at, a sequence of contiguous locations connecting the starting and ending points, and a direction" (Lakoff 1987: 275). In its turn this leads to the development of natural metaphorical concepts which we use to make sense of our world: thus purposes are understood in terms of destinations, as are complex events in general (Lakoff and Johnson 1981; Rudzka-Ostyn 1983). We will not be concerned with these fascinating extensions in this study but will concentrate on the direct physical applications of the schema.

We will first consider the physical aspects of walking, regarded as prototypical locomotion. Then, before presenting a detailed discussion of the SOURCE-PATH-GOAL schema based on Talmy's development of it, we will briefly look at some earlier analyses in the structuralist frame.

3.2.1 Walking as prototypical locomotion

Walking is a complex physical activity controlled by both hemispheres of the brain (left hemisphere for the right side of the body and vice versa), linked through the *corpus callosum*, but with the left hemisphere taking the leading role as it does with language (Nathan 1987: 522). However, physiologists have come to realize that animal movements are co-operative phenomena, resulting from the active interlocking of forces and processes throughout the bodily periphery and the environment as well as the nervous system (Whiting 1984).

We have seen that the child only gradually develops a sense of non-egocentric space (3.1.1). The precise cerebral control of the forces involved in movement also takes time to develop, paralleling the child's growing control over language. Initially he is restricted to the crawling mode of locomotion,

which he will continue to make use of in his games; indeed, adults will still need it for situations such as injury where walking is impossible.

The achievement of walking, from the first stumbling steps to full upright posture, is a highly significant stage in an infant's life and one with which everyone is familiar. It is not so well known that running diverges from walking only in the second and third years and that "the evolution of the locomotor act involves nearly the whole of childhood and extends almost to the beginning of puberty" (Whiting 1984: 196).

The usual explanation of the difference between walking and running in terms of contact of the feet with the ground does not give the full picture. The movement of walking, like that of running, consists, for each leg, in the alternation of periods of support and 'swing-through'. In walking the swing phases are of shorter duration than the periods of support, while in running the reverse is the case. Because of the shorter duration of the swing phase in walking, there are double support intervals during which one leg has not yet completed and the other has already begun its support phase. Such intervals do not occur in running, which can be characterized as a compliant mode of gait, in contrast to the stiff-legged gait of walking (Whiting 1984: 297)

There are other modes of gait, such as galloping and jumping, which have been brought to perfection by such creatures as the horse and the frog. For humans, however, jumping is a limited, though useful, mode of locomotion. Even Olympic competitors in this event are not likely to jump their way from the village to the stadium.

Walking, then, is prototypical locomotion. This is reflected in the lexicons of many languages. Thus the French verb *aller* ('to go') is derived from the Latin *ambulare* ('to walk'). In English the verb *go* used to have a specific application to walking as distinct from other modes of movement — the OED speculates that this might be the primitive sense — which is well illustrated in the following quotation it gives from Bunyan's *Pilgrim's Progress*:

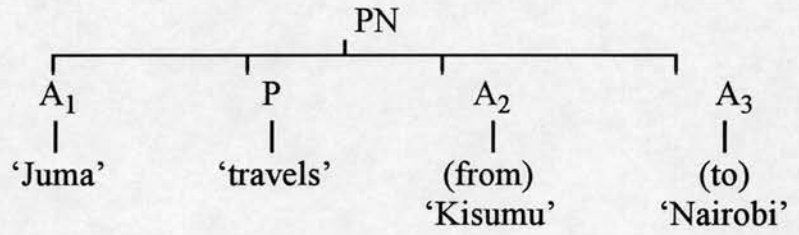
> *I have resolved to run when I can, to go when I cannot run, and to creep when I cannot go.*

In a way *go* has changed places with *walk* which did not originally have the specific meaning 'to go on foot', but in Middle English simply meant to move about or travel. According to the OED, the explicit expression *walk on foot* occurs as late as Macaulay (i.e. mid-19th century), though no citation is given.

Many African languages have a single verb which can express a general sense of motion as well as the act of walking (see 4.2), for example *wuoth* in Luo. In Lunyore *okhuchenda* can also mean 'to go for a visit', while *wiy* in Nandi has a general sense of movement away (as does the English *go*, cf. Fillmore 1971/1983) and so can mean 'leave'.

3.2.2 The linguistic representation of motion events: structuralist approaches

As we have seen in the previous section, spatial relations are largely expressed by closed-class grammatical items; for their full expression motion events also require open class lexical items , and in any language these are basically verbs. If we return to our sentence exemplifying Lyons' paradigm case of concrete locomotion (see 3.1.1), we could represent its propositional content in structural terms like this:



i.e. a predicate and three arguments, which corresponds to Lyons' valency schema MOVE (ENTITY, SOURCE, GOAL) (Lyons 1977: 494). However the uncertain status of the parenthesized prepositions casts some doubt on the analysis. It appears that 'travels', 'from' and 'to' work together closely in some way. Various interpretations have been proposed.

3.2.2.1 Analysing the propositional content

Miller and Johnson-Laird (1976) treat the prepositional phrases as predicate modifiers and provide a formula of this type:

(FROM(TO(TRAVEL)))(a, c, b)

in which a, c and b stand for 'Juma', 'Nairobi' and 'Kisumu' respectively.

Leech's (1969, 1981) treatment is somewhat different. He would class the phrases as two co-ordinated rank-shifted (or, in his later terminology, downgraded) predications. His earlier representation (using the sentence 'John cycled from London to Edinburgh' as a model) attempts a full componential analysis (Leech 1969):

a′.→i + MOV.((i′.~→PLA[1DIME].b) & (i′.→PLA[1DIME].c)

Leech gives a paraphrase 'John by cycling came to be not at London but at Edinburgh', which seems to reduce the event to a succession of two states with little indication of a dynamic process.[6] In his later 'Signese' notation (Leech 1981) the proposition is likely to be represented more simply as

(a : P < a . Q . c > < a . Q . b >)

where P and Q represent predicate variables.

3.2.2.2 The Path concept

None of these analyses makes any use of the notion of path referred to earlier, but the action schema of a journey (used here as a localistic term) includes, even if it is not directly stated, a path or route (Lyons 1977: 701,720; cf. also Bennett 1975). "The conceptual core of the system for indicating movement is the path, which usually has a distinctive beginning and end" (Miller and Johnson-Laird 1976: 406). Jackendoff (1983) has usefully developed this notion to cover a wider range of spatial concepts. He distinguishes three broad types of path - bounded paths (FROM/TO), directions (AWAY FROM/TOWARDS) and routes (VIA) — as well as three 'path roles' — traversal, extensional and orientation. This gives nine possible type/role combinations, of which only the three traversal ones involve motion as such. Jackendoff illustrates them as follows:

I ([THING] traverses [PATH])

a. *John ran into the house.* (bounded path)
b. *The mouse skittered toward the clock.* (direction)
c. *The train rambled along the river.* (route)

II ([THING] extends over [PATH])

a. *The highway extends from Denver to Indianapolis.*
b. *The flagpole reaches (up) toward the sky.*
c. *The sidewalk goes around the tree.*

III ([THING] is oriented along [PATH]

a. *The sign points to Philadelphia.*
b. *The houses face away from the mountains.*
c. *The cannons aim through the tunnel.* (Jackendoff 1983: 168)

---

[6] This kind of analysis of motion derives from Gruber (1965).

To return to our test sentence, we may now see the kind of analysis Jackendoff's treatment is likely to give it:[7]

Event GO [Thing JUMA] [Path FROM [Thing KISUMU]
[Path TO [Thing NAIROBI]

3.2.2.3 Other componential analyses

A rather different, but highly detailed, attempt to classify motion verbs in English is to be seen in the semological study of Ikegami (1970), based on stratificational grammar. He arranges the verbs in four main classes, taking *go* in its main sense as the basic motion verb. The first class is labelled with Go_1 alone and includes only two verbs, *go* itself and *move*. The second class is Go_1 + Adverbial Element, divided into the sub-types of Course, Speed, Impetus, Distance and Manner. The third class is Go_1 + Prepositional Element (+ Nominal Element) and includes the sub-types of Direction, Passage, Relative Position, Means and Space. The fourth class is Go_1 + Conjunctive Element + Verbal Element and has the sub-types of Mode, Accompanying Circumstance, Purpose and Result. It can be seen that his classification is largely a grammatical one, with somewhat ad hoc semantic sub-divisions.

Another very detailed description is that of Weniger (1974). This time the framework is that of generative grammar, within which she uses some aspects of semantic field theory and distinguishes three sets of conceptual features in locomotion verbs: steps (pedal features), manner and direction/place. Verbs are listed with a full set of features, e.g.

crawl
move + (+Hands/Knees) + (+Clumsily) + (-Directionally Determined)

reach
move + (+0_p) + (+0_m) + ((+Directionally Determined):
((-Inceptive) . (+1Dim)))[8]

What is interesting about Weniger's work is the detailed specifications which she gives of types of spatial relations and the distinction she makes between directionally determined verbs and directionally undetermined verbs

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[7] As he does not directly treat sentences of this type, I can only guess how he would show the co-ordinated prepositional phrases.

[8] Note that 0_p means absence of inherent pedal quality; 0_m means absence of inherent modal (manner) quality.

incorporating features of modality (pedal or manner), which parallels Talmy's Path /Manner distinction (see below).

The value of a more or less exhaustive componential analysis such as those of Weniger, Leech (1969) or Miller and Johnson-Laird in their analysis of TRAVEL and other motion verbs, is rather dubious. Miller's (1978) expanded analysis of the verb *hand*, as in *She handed her hat to him*, ends up with a twelve-line battery of what are claimed to be irreducible 'primitive' concepts. Even he has to admit that it is unlikely to be this unwieldy structure that a person brings immediately to mind when he retrieves *hand* from lexical memory. "The meaning of *hand* would be thought of as a conceptual unit, a gestalt, that normally functions as a whole but that can, like any gestalt, be taken apart by special acts of attention when necessary" (Miller 1978: 93).

3.2.3 The linguistic representation of motion events: a cognitive approach

We have already seen that the broader perspective of Cognitive Semantics (2.3.3) provides a more illuminating treatment of the spatial relations underlying motion events (3.1.3). In looking at the semantics of motion events in themselves, we once again find that it is the radical intuitive approach of Talmy, backed up by examples from a wide range of languages, that gives us a key to understanding it. Talmy (1983) has a set of ten primitive station/motion formulas "that seem to underlie all the more complex characterizations of stasis and movement in language". These formulas fit quite neatly into the SOURCE-PATH-GOAL schema already discussed. Figure 3.2 gives a diagrammatic impression of the relations between the formulas.

Other studies by Talmy provide further insight into the semantics of motion (Talmy 1975, 1985) and together with the 1983 paper will form the basis of the discussion in the next two sub-sections.[9]

[9] Talmy has further developed his typology to cover events generally (see Talmy 1991) and in the process reduced it to two categories. Depending on where the 'core schema' of an event—for Motion this is the Path—is typically expressed, a language can be classed as being either verb-framed or satellite-framed. Although this version does not invalidate the earlier typology, it should be stressed that it was the latter which was used in the present research. Some empirical support for this typology, at least as far as the contrast between Germanic and French is concerned, is provided by the European Science Foundation research on spatial reference reported in Chapter One (1.4.1).

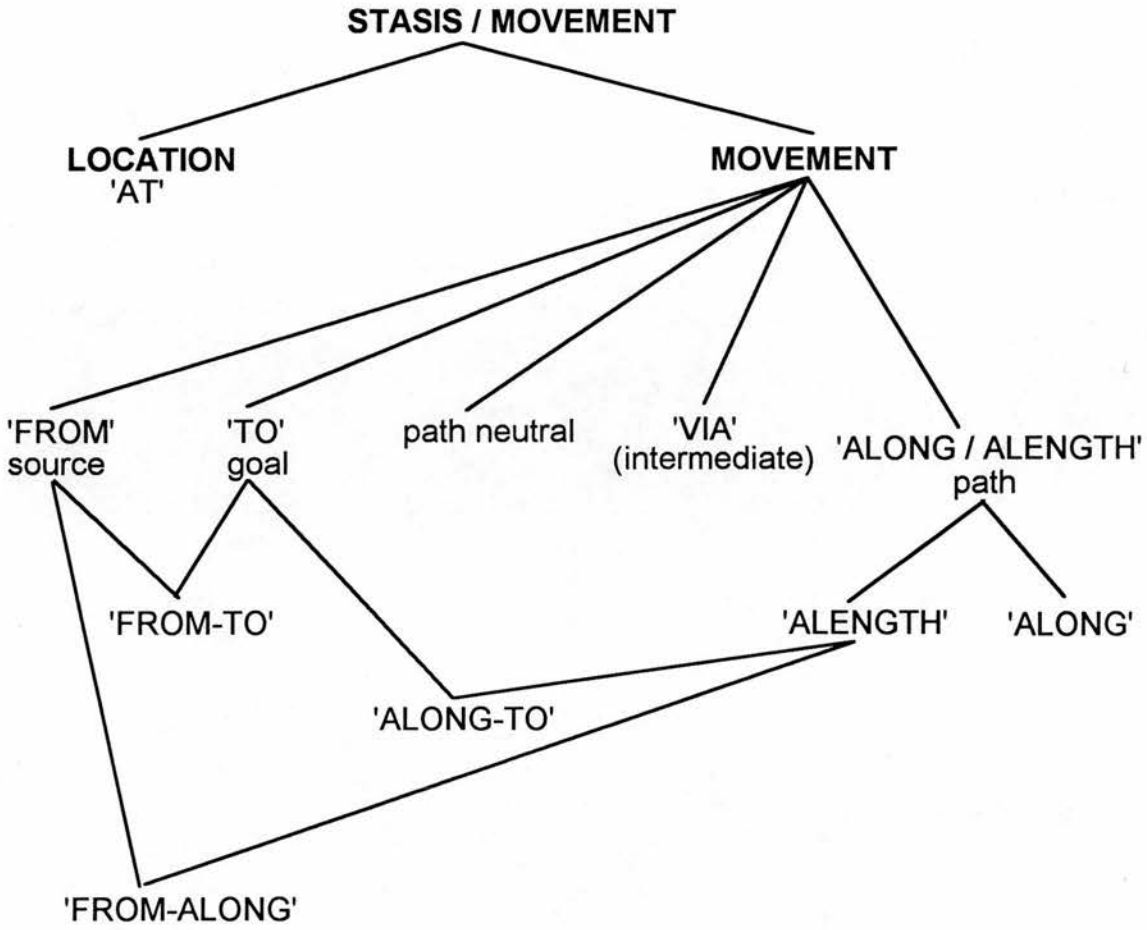


Figure 3.2: Basic station/motion types (based on discussion in Talmy 1983)

3.2.3.1 Motion events and Path types

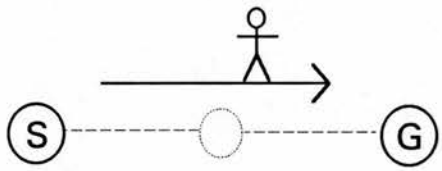
Central to Talmy's view of a 'motion event' are the components of 'Figure', 'Ground', 'Path' and 'Motion'. 'Figure' and 'Ground' were introduced earlier, in the discussion on spatial relations (3.1.3.3). The concept of Path has also been mentioned in relation to Jackendoff's path roles. Talmy simply defines it as the course followed or the site occupied by the Figure object with respect to the Ground object (Talmy 1985: 61). 'Motion' refers to the presence or absence of motion, represented by 'move' or 'be ' (i.e. 'be located'), respectively, corresponding to the 'motional' and 'positional' components of Gruber (1976); the arrow stands for the fact of motion and its direction is not significant, since motion can be in any direction.. The four components can be represented diagramatically[10]:

[10] These are my own attempts at graphic interpretation; Talmy himself does not use diagrams here.

- Figure 
- Motion 
- Path
- Ground 

The basic motion event therefore consists of one object (the Figure) moving or located with respect to another object (the reference-object or Ground). In addition a motion event can have a 'Manner' or a 'Cause', which Talmy sees as external to the motion event itself. (See Figure 3.3 below). He argues that his notions of Figure and Ground etc. have several advantages over Fillmore's system of cases (cf. Fillmore 1968, 1977b).

In the discussion that follows I have grouped together some of the types shown in Figure 3.2, so that there are now five basic Path types, excluding location.

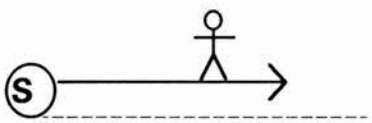


In this generalized diagram Path is shown as a broken line joining two Ground objects — Source and Goal — with an optional intermediate Ground. This gives the basic plan of a **journey**: to go from A to B by way of C (Lyons' paradigm case of concrete locomotion).

He travelled from Edinburgh to London via York

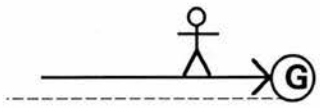
The plan is however a conflation of three Path types which can be analysed separately.

Types I and II are complementary, each focusing on one end of the journey plan. In **Type I** the Figure is in motion *from* (or *away from*) the Source:



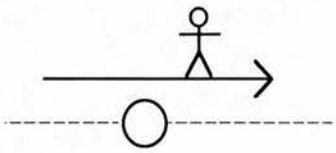
She left the building

In **Type II** the Figure is in motion *to* (or *towards*) the Goal:



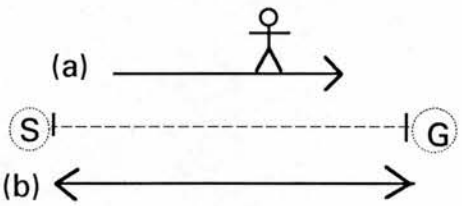
He ran to the door

In **Type III** the Ground is not one of the journey's end-points. The arrow is shown above the intermediate reference object, although in many cases the actual motion passes *through* it.



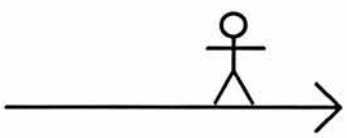
He crossed the frontier

Type IV is really two sub-types, in both of which the focus is on the Path itself, but the difference lies in the Path's boundedness. A Path may be seen as either a bounded or an unbounded extent. If it is unbounded, the end-points are irrelevant, but if it is bounded one of them *may* form the boundary. Unbounded motion (a) is motion *along* an extent; bounded motion (b) is '*alength*' an extent (i.e. along its full length), with the possibilities of this being 'from-along' a Source or 'along-to' a Goal.[11] The bounded extent may have an identical starting and finishing point, i.e. be circular.



(a) *She walked some way along the path*
(b) *She walked the whole length of the path*

The simplest type of locomotion — **Type V** — is inherently neutral with regard to Path:



[11] Talmy points out that the Spanish prepositions *desde* and *hasta* convey these last two notions precisely. They can be illustrated in English with these sentences: *The coach has been travelling from London since 11 o'clock* and *This bus goes all the way to Leith.*

The man is jogging

The default or unmarked value of the statement is of course forward motion (rather than backward or 'contained' motion, i.e. jogging on the spot). To take another example, Galileo's famous aside *Eppur si muove* has implicit Path reference — the orbit of the Earth round the Sun.

Path-neutral motion always implies a reference object (Ground), since motion, like location, necessarily involves one object in relation to another. The Ground is not always directly stated, however.

Manner or Cause, in themselves external to the motion event, are frequently associated with Path-neutral motion. Verbs of this type are common in English, as we shall see in the next section.

3.2.3.2 A typology of the lexicalization of locomotion

We are now in a better position to understand Talmy's typology of the lexicalization of locomotion (Talmy 1985).

Talmy is concerned mainly with the verb root. This is because he is interested in comparing lexicalization patterns across languages with very different word structure. He gives as examples the contrasting pair of Chinese, where the verb root generally stands alone as an entire word, and Atsugewi, an Amerindian language, in which the verb root is surrounded by affixes that together make up a polysynthetic verbal word.

It is Talmy's contention that every language will have one of three basic lexicalization patterns as its most characteristic expression of motion. He further explicates 'characteristic' to mean:

(i) It is **colloquial** in speech, rather than literary, stilted, etc.

(ii) It is **frequent** in occurrence in speech, rather than only occasional.

(iii) It is **pervasive**, rather than limited, that is, a wide range of semantic notions are expressed in this type (Talmy 1985: 62)

For English, we can illustrate the characteristic pattern with this sentence:

Juma ran away

Although it might seem to represent a conceptually simple motion event, closer examination will reveal that this is actually a complex event that has undergone conceptual conflation. If we try turning it into a complex sentence—

Juma left by running

—we have something which sounds rather unnatural in English but does make clear the two semantic components represented by the main and subordinate clauses, expressing a Path concept and a Manner concept respectively. In the more natural original sentence the Path concept is found in the particle *away* and the Manner concept in the verb *ran.*

Thus English has a pattern in which the verb expresses both the fact of Motion and its manner (alternatively its cause, as in *She pushed him away*). Languages which are like English in this respect include all other Indo-European languages, except the Romance family, as well as Chinese. Talmy points out that languages of this type have a whole series of verbs in common use that express Motion occurring in various manners or by various causes. We can show this with the following examples (confined to verbs with Manner conflation) from the COBUILD Dictionary:

I just ambled home through the village.
We clambered up the hill.
The baby is crawling about and upsetting things.
She darted forward and kissed Mary on the cheek.
He hobbled along as best he could.
He hurried off down the street.
He jumped down from the terrace.
Harold paced nervously up and down the platform.
I ran downstairs to open the door.
John scrambled up the bank.
We managed to stagger back up to the deck.
They strolled along the beach.
We tramped through the wood.
The children waded out into the lake.
We wandered round the little harbour town

These examples show a range of verb particles used to express the Path of motion. Verb particles can be either prepositions or spatial adverbs (Quirk *et al.* 1985: §16.12; for a full discussion see Fraser 1976), but not all are what Talmy calls 'satellites', a term he introduces in order to "capture the commonality between such particles and comparable forms in other languages" (Talmy 1985: 102), such as German, Latin and Russian verb prefixes and Atsugewi verb affixes.

In the second type of lexicalization pattern, the verb root expresses both the fact of Motion and the Path. To illustrate this is in English we do not have to

resort to unnatural sentences like the one constructed earlier to show the semantic components of *Juma ran away*. Sentences of this type are quite likely:

He crossed the room slowly

However, English does not have a whole series of verbs expressing Motion along various paths that we find in languages with this type, such as the Romance languages, Semitic, Polynesian and, as we shall see, at least some African languages. Talmy regards Spanish as a perfect example of the type and gives examples like this:

La botella entró a la cueva (flotando)
the bottle moved-in to the cave
'The bottle floated into the cave'

We could also illustrate it from French:

Il est descendu en courant
he AUX came-down by running
'He ran downstairs'

All these examples show that, if Manner or Cause is expressed in the same sentence, it must be as an independent constituent, usually an adverbial or gerundive. Talmy points out that in many languages of this type such a constituent can be "stylistically awkward", so that information about Manner or Cause is often either provided in the surrounding discourse or omitted altogether (Talmy 1985: 69).

As the example above shows, English does have some verbs that incorporate Path, such as *enter, pass, return, depart, advance*, but they often convey greater formality than Manner verbs of motion and it is significant that many of them, including all of those mentioned here, are in fact loan words from Romance (French).

The third lexicalization type can, like the first type, use satellites to express Path, but is unique in conflating Motion with the Figure. Languages with this characteristic pattern would seem not to be numerous: Talmy only mentions a few Amerindian languages. They have a range of verb roots that express the movement or location of various kinds of objects or materials, many of which seem quite bizarre categories to the outsider, but which doubtless make good sense in the societies where they are (or were) found. Talmy gives these examples used in Atsugewi, a language of which he has made a particular study: 'a small shiny spherical object (e.g. a round candy, an eyeball, a

hailstone)' and 'a slimy lumpish object (e.g. a toad, a cow dropping) (Talmy 1985: 73).

English does nevertheless have a few forms that can be used to illustrate this pattern. Talmy mentions two: the verb *rain* refers to rain as the Figure moving and the verb *spit* refers to causing spit (the Figure) to move:

It rained through the bedroom window

He spat on the floor

Other examples are the verbs *bleed* and *moult* as in

His nose bled on to the pillow

The cat moulted all over the sofa

3.2.3.3 Conclusion

Talmy's analysis of the semantics of motion, with its cross-linguistic perspective and subtle intuitive basis to recommend it, will form the theoretical model for this research project.[12]

It is worth noting that a linguist of a different persuasion to Talmy, Jackendoff (1990), nevertheless accepts his treatment of Path and Manner verbs. However, in his analysis, verbs of Manner incorporate a MOVE function:

[event MOVE] [thing]

as distinct from a GO function:

GO [THING] [PATH]

He also makes the important point that, *pace* Leech, Weniger, Miller and others who have tried, Manner verbs cannot be broken down satisfactorily into features.

From another perspective, we find that a recent psycholinguistic study by Choi and Bowerman (1991) makes use of Talmy's typology and presents findings, based on work with English and Korean children, which suggest that children are influenced by the motion event lexicalization patterns of their language right from the start.

We shall now look in more detail at the English lexicon of locomotion using the insights gained from this and the previous section.

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[12] McNeill (1987) uses Whorf's term *cryptotype* ('an abstract structure which embodies a cultural model') to refer to Talmy's lexicalization typology. He suggests that the motion + cause/manner conflation pattern of English 'for most speakers probably is transparent (projected onto reality)".

3.3 The English lexical domain of locomotion

> That vast aggregate of words and phrases which constitutes the Vocabulary of English-speaking men presents, to the mind that endeavours to grasp it as a definite whole, the aspect of one of those nebulous masses familiar to the astronomer, in which a clear and unmistakable nucleus shades off on all sides, through zones of decreasing brightness, to a dim marginal film that seems to end nowhere, but to lose itself imperceptibly in the surrounding darkness. In its constitution it may be compared to one of those natural groups of the zoologist or botanist, wherein typical species forming the characteristic nucleus of the order, are linked on every side to other species, in which the typical character is less and less distinctly apparent, till it fades away in an outer fringe of aberrant forms, which merge imperceptibly in various surrounding orders, and whose own position is ambiguous and uncertain. For the convenience of classification, the naturalist may draw the line which bounds a class or order, outside or inside of a particular form; but Nature has drawn it nowhere. (OED 1st edn, 'General Explanations'; attributed to Sir James Murray)

The difficulties of a lexicographer in establishing the boundaries of English vocabulary as a whole, so eloquently described by Murray, also apply, on a lesser scale, when one is investigating smaller areas of the lexicon. It is helpful to appeal to prototype theory, as Murray did (long before Eleanor Rosch developed it).

It has been suggested in the first two sections of this Chapter that in order to understand the semantic domain of locomotion it is necessary to consider certain basic concepts of spatial relations as well as the physically-derived schema of motion events. This provides a universal cognitive basis which limits the room for variation between languages. However, there is a typology of verb lexicalizations with respect to motion, which languages use selectively.

3.3.1 The content of the domain

The concept of a semantic field of motion was the basis of one 'case study in semantics and verbal memory' (Miller 1972). As Miller later wrote:

> It does seem to be possible to isolate a well-behaved semantic field of about two hundred verbs of motion, all of which have TRAVEL as a component operator: *move*, *come*, *go*, *bring*, *take*, *walk*, *run*, *rise*, *raise*, *drop*, *fall*... (Miller 1978: 45)

He admitted that some of the verbs in his 1972 list might not be motion verbs at all. Verbs like *absorb* and *shrink* seem rather doubtful. Some motion verbs can be used in a sense of what Talmy calls 'contained motion' as opposed to 'translational motion' (Talmy 1975: 224):

The ball bounced up and down on the pavement
The log rolled round and round in the water

For the purposes of this research we need to set up a list of relevant verbs and their associated particles (or 'satellites'). As the definition quoted at the beginning of the chapter made clear, we are concerned only with *human* self-agentive locomotion.

The English lexicon of locomotion certainly contains a large number of items, including many that are borrowed from other domains. Some idea of its content can be gained from a brief glance at the treatment of this semantic field in two well-known reference works. The first of these, Roget's Thesaurus, is a long-established classification of vocabulary designed to assist native speakers in their writing, still very largely based on the conceptual principles of its nineteenth century founder. The lexis of locomotion forms quite a large part of the 'Motion' section, which belongs to Class II ('Space'). It is interesting to compare the list of relevant verbs from the first edition (Table 3.1) with that of the latest edition (Table 3.2).

The huge difference in numbers is probably due not so much to any substantial increase in the vocabulary of locomotion as to changes in editorial policy, allowing a wider range of items, including American and Australian expressions. Looking at individual items, we find that *expatiate* is no longer used in this field, *bundle* is not used here intransitively any more and *peg on* may have fallen into disuse, but otherwise the items in Roget's original list are still to be found, with some changes in arrangement, in today's greatly expanded version.

Table 3.1 Extract from the first edition of Roget's Thesaurus (Roget 1852)

266. Locomotion by land

. . . . . .

V. To travel, journey, ramble, roam, rove, course, wander, stroll, straggle, expatiate, gad about; to go or take a walk, journey, tour, turn, trip &c, ; to prowl, stray, saunter, make a tour, emigrate, flit, migrate.

To walk, march, step, tread, pace, wend, wend one's way, promenade, perambulate, circumambulate, take a walk, take the air, trudge, stalk, stride, strut, foot it, stump, peg on, bundle, toddle, shuffle on, tramp, traverse, bend one's steps, thread one's way, make one's way, find one's way, tread a path, take a course, defile, file off.

[Ride...]

Table 3.2 Extract* from the 1987 edition of Roget's Thesaurus (Kirkpatrick 1987)

267. Land travel

Vb. *travel*, fare, journey, peregrinate, tour, see the world, go globetrotting, go on a world cruise, visit, explore; get around, knock about, go places, sightsee, rubberneck; pilgrimage, go on a pilgrimage; go on a trip, make a journey, go on a journey; go on safari, trek, hump bluey; hike, backpack; be always on the move, live out of a suitcase; set out, fare forth, take wing; migrate, emigrate, immigrate, settle; shuttle, commute; take oneself off, swan off, slope off; go to, hie to, repair to, resort to, betake oneself to; go; wend, wend one's way, stir one's stumps, bend one's steps, shape one's course, tread a path, follow the road, make one's way, pick one's way, thread one's way, elbow one's way, force a way, plough through; jog on, trudge on, shuffle on, pad on, plod on, tramp on, march on, chug on; course, race, post; proceed, advance; coast, free-wheel, glide, slide, skate, ski, skim, roll along, bowl along, fly along

traverse, cross, range, pass through, range through go round, beat the bounds; go the rounds, make one's rounds, patrol; scout, reconnoitre; scour, sweep, sweep through

wander, nomadize, migrate; rove, roam, bum around; ramble, amble, stroll, saunter, mosey along, potter, dawdle, walk about, trail around; gad, traipse, gallivant, gad about, hover, flit about, dart about; prowl, skulk; straggle, trail; lose the way, wander away

walk, step, tread, pace, stride, stride out; strut, stalk, prance, mince; tread lightly, tiptoe, trip, skip, dance, curvet; tread heavily, lumber, clump, stamp, tramp, goosestep; toddle, patter, pad; totter, stagger, lurch, reel, stumble; limp, hobble, waddle, shuffle, shamble, dawdle; paddle, wade; go on foot, go by Shanks's pony, foot it, hoof it, hike, footslog, wear out shoe leather; plod, stump, trudge, jog; go, go for a walk, ambulate, perambulate, circumambulate, pace up and down; go for a run/jog, take the air/one's constitutional; march, quick march, slow march, troop; file, file past, defile, march in procession; walk behind; walk in front

[*ride....*]

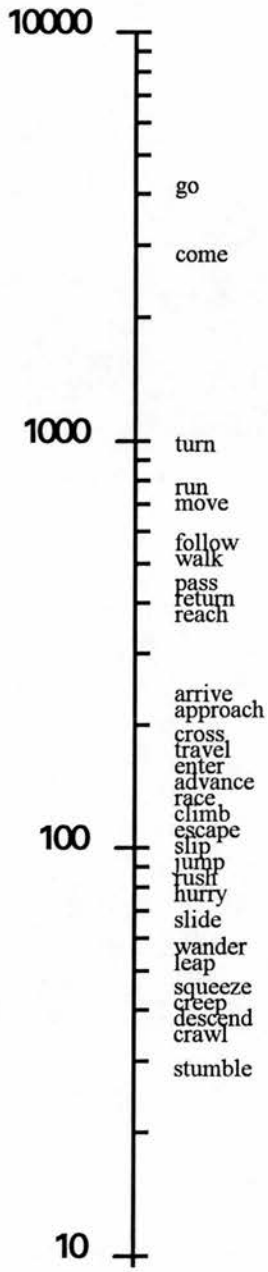
*omitting cross-references

The other work is the more recent Longman's Lexicon of Contemporary English, aimed at second language teachers and learners of English (McArthur 1981). Unlike Roget this provides definitions and usage examples of the items listed, which are understandably fewer in number. Field 'M', headed 'Movement, Location, Travel and Transport', consists of 225 'sets' of items arranged in eight groups. The first and the last of these groups—'Moving, Coming and Going' and 'Location and direction'—contain most of the common verbs and prepositions of locomotion. The third group, 'Travel and Visiting', has some additional verbs, while 'Places' gives many of the associated nouns. The relevant verbs are listed in Table 3.3.

Table 3.3 The lexis of locomotion: verbs from the Longman Lexicon (McArthur 1985)

move, move about/around, m. along, m. away, m. in, m. off, m. on, m. out, m. over, come, go, pass, get, set, circle, circulate, approach, near
leave, go away, go off, depart, depart from, set out/off, start out/off, come out, emerge, appear
arrive, get in, come in, turn up, reach, get to, descend (up)on, enter
get off, g. down, g. out, alight, descend, disembark, sink
climb, clamber, mount, ascend, scale, get on, board, embark
walk, step, run, hitchhike, fly, cross, traverse, file, roll
limp, hobble, stagger, lurch, tiptoe
amble, stroll, saunter, wander
stride, strut, march, pace, parade
hike, tramp, stamp, stump, trudge, ramble, trek
race, dash, career, tear, pound
scamper, scurry, scuttle, scramble, dart, bolt
crawl, creep, wriggle, slither, slide, slip, sidle, sneak, slink
loiter, linger, hang about/around, mill about/around, loll, lounge
hurry, hasten, rush, rush into, shoot, stampede
follow, chase, pursue, go after, hunt, trail
escape, flee, get away, elude, decamp, abscond, break out
evade, dodge, desert
advance, move forward, head, progress
turn, veer
travel, wander, roam, tour, rove, journey, migrate, emigrate, immigrate, commute

Some of the items in these lists, especially the latest Roget, are clearly of very limited occurrence. Word frequency lists may give some idea of the relative frequency of items (Figure 3.3). but need to be supplemented by native speaker intuitions. Both the COBUILD and American Heritage counts have more Path verbs near the top than Manner verbs. This is probably because of their extensive (non-locomotion) metaphorical use, especially in the case of *go* and *come*; which may also explain why *run* is commoner than *walk.*



<1 in 1,000 tokens

come, find, get, go, set, take,

fall, follow, leave, move, pass, reach, run, stand, start, stop, turn, walk, catch

<1 in 10,000 tokens

climb, continue, cross, enter, join, jump, push, arrive, hurry, meet, return, travel, visit

crawl, hide, slide, slip, approach, creep, dash, escape, rush

<1 in 100,000 tokens

scramble, squeeze, wade

escort, stroll, retreat

<1 in 1,000,000 tokens

limp, sneak, alight, jog, trek

Figure 3.3: Motion verb frequencies
(left) in the COBUILD corpus (adjusted lemma totals; log scale)
(right, boxed) in the American Heritage count (Carroll *et al.* 1971)

Table 3.4 provides a fairly comprehensive list of single item verbs of locomotion (i.e. excluding phrasal verbs and other fixed expressions) together with the particles which Talmy calls Path satellites. The verbs have been divided into Path and Manner types; this has served as the working list for this research. Some of the items are difficult to classify. *Climb* and *jump* are listed as Manner verbs but clearly contain Path elements. *Chase* and *flee* are placed with Path verbs although they have Manner components. In the end a researcher has to rely on his own intuitions to decide where to put these items, since statistical analysis requires clear-cut categories.

I have also indicated with an asterisk those verbs that seem to belong to what could be called the learner's basic lexicon of locomotion, more precisely the items I would expect all my subjects, even at the lower proficiency level, to have as active vocabulary. A useful guide in the selection of these items has been the lists in Hindmarsh (1969, 1980), which have been influential in African educational circles.

Examples from the Collins COBUILD Dictionary (1987) of the usage of all the verbs listed will be found in Appendix L. It is interesting to see the distribution of Path types in the examples, though I would not claim that it is necessarily representative of English as a whole (Table 3.5).

Table 3.5: Distribution of Path types in the COBUILD examples in Appendix L

	PATH VERBS		MANNER VERBS	
	No.	%	No.	%
Type I	13	17.3	13	10.7
II	18	25.3	26	21.3
III	8	11.3	15	12.3
IV	28	39.4	42	34.4
V	4	5.6	26	21.3
Total	71	100.0	122	100.0

TABLE 3.4 The lexical field of locomotion in English

PATH VERBS		MANNER VERBS		SATELLITES	
accompany	reach*	amble	scamper	over	after
advance	retreat	bolt	scramble	by	behind
alight	return	charge	scurry	about	in front (of)
approach	rise*	clamber	scuttle	around	past
arrive*	scale	climb*	shuffle	in	beyond
ascend	set	crawl	sidle	out	opposite
board	tour	creep	skip	at	
chase	trail	dart	slide	inside	
circle	travel*	dash	slink	outside	
come*	traverse	file	slip	within	
cross	turn*	hike	slither	from	
depart		hobble	sneak	across	
descend		hop	squeeze	under	
disembark		hurry*	stagger	above	
embark		jog	stamp	below	
enter		jump*	step	beneath	
escape		leap	stray	underneath	
escort		limp	stride	along	
fall*		loiter	stroll	through	
flee		lunge	strut	against	
follow*		lurch	stump	between	
get		march*	tiptoe	home	
go*		pace	toddle	away	
halt		parade	totter	apart	
journey		push	tramp	forward(s)	
leave*		race	tread	backward(s)	
migrate		ramble	trek	aside	
mount		roam	trudge	up(wards)	
move*		rove	wade	down(wards)	
pass*		run*	walk*	on	
precede		rush*	wander	onwards	
pursue		saunter	wriggle	off	

3.3.2 The structure of the domain

The lexicon of any language is the product of a complex interaction over many centuries between underlying cognitive determinants and a variety of other psychological, social, cultural and linguistic factors whose precise role is not easy to assess (for general discussions of the diachronic aspect of the lexicon see Arlotto 1972, Samuels 1972 and Hock 1986). We also need to remind ourselves of the 'fuzzy' nature of meaning and the fact that lexical items often belong to several semantic fields. Consequently any lexical domain is bound to be a rather untidy affair.

In the domain of locomotion there is, for instance, some disagreement as to which verb is fundamental. Ikegami (1970) uses GO in the formulation of his semantic classes, commenting that GO and MOVE are the least marked terms. MOVE is the verb that Weniger (1974) employs to express the underlying concept of movement. Miller (1972), on the other hand, opts for TRAVEL, because it expresses change of location "as simply as possible, unencumbered by any other semantic component". Perhaps the somewhat inelegant, but attested, verb—LOCOMOTE—could serve to denote an abstract unmarked concept of movement from one place to another. It is doubtful, however, whether an overall term is really needed.

One can certainly try to draw up a hierarchical taxonomy of the most common verbs of motion, but some of the superordinates will be missing or doubtfully filled (see Figure 3.4). The two superordinates which form co-hyponyms of the topmost node might be paraphrased, somewhat awkwardly, as 'travel using muscular power alone' and 'travel by conveyance'.[13] The node to the left of 'swim' might be labelled 'travel on land'. 'Step' is a possible, but not completely convincing, superordinate for 'walk' and 'run'. However, all the underlined verbs are intuitively at the same level of generality, i.e. basic level terms (see 2.3.1).

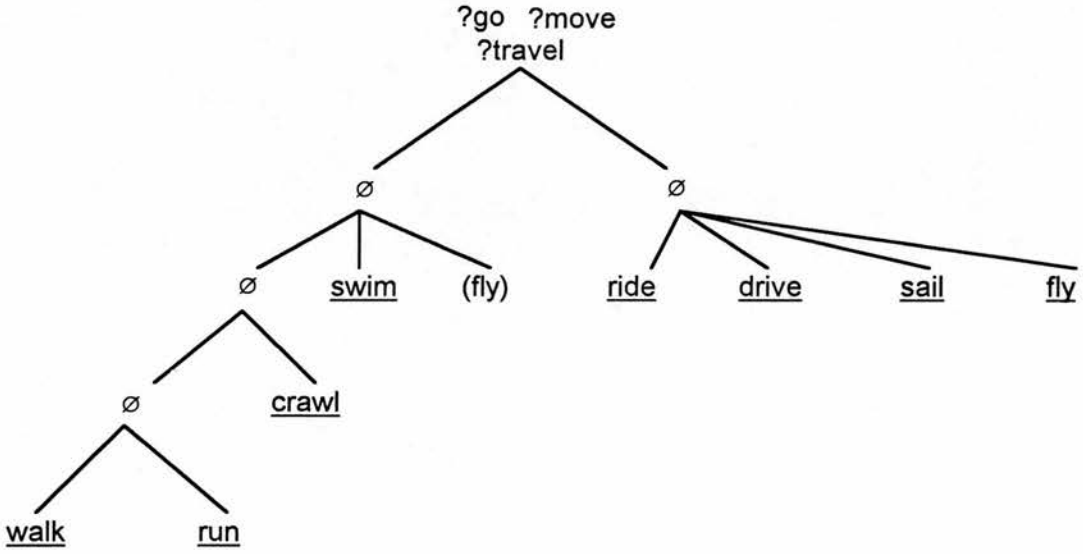


Figure 3.4: A hierarchical taxonomy of the most common verbs of motion

To attempt to continue this kind of analysis still further is to run into even more problems of analysis and differentiation. One might want to distinguish between irregular, gentle, vigorous and long-distance types of walking, but then

[13] The latter notion is lexicalized in German as *fahren*.

under the 'irregular' node how is one to arrange 'limp', 'hobble', 'lurch' and 'tiptoe'? Another difficulty is that the long-distance type seems to cut across the other three. In the course of a day's hiking it is quite easy to envisage striding, strolling and, alas, limping all occurring at various stages. How are we to classify 'loiter'? Are 'scurry' and 'dart' types of walking or of running? (see below for further discussion of this issue).

This illustrates very well the difficulty of this kind of analysis, even though word association tests seem to demonstrate the existence of links between items in the mental lexicon. For instance, some the 'norms' listed by Deese (1965) can be used to construct a diagram showing some of the links between a number of motion verbs and prepositions (Figure 3.5).[14] However, whatever the validity of the norms, a simple diagram like this in two dimensions can hardly give more than an idea of what must be an extremely complex network of relationships.

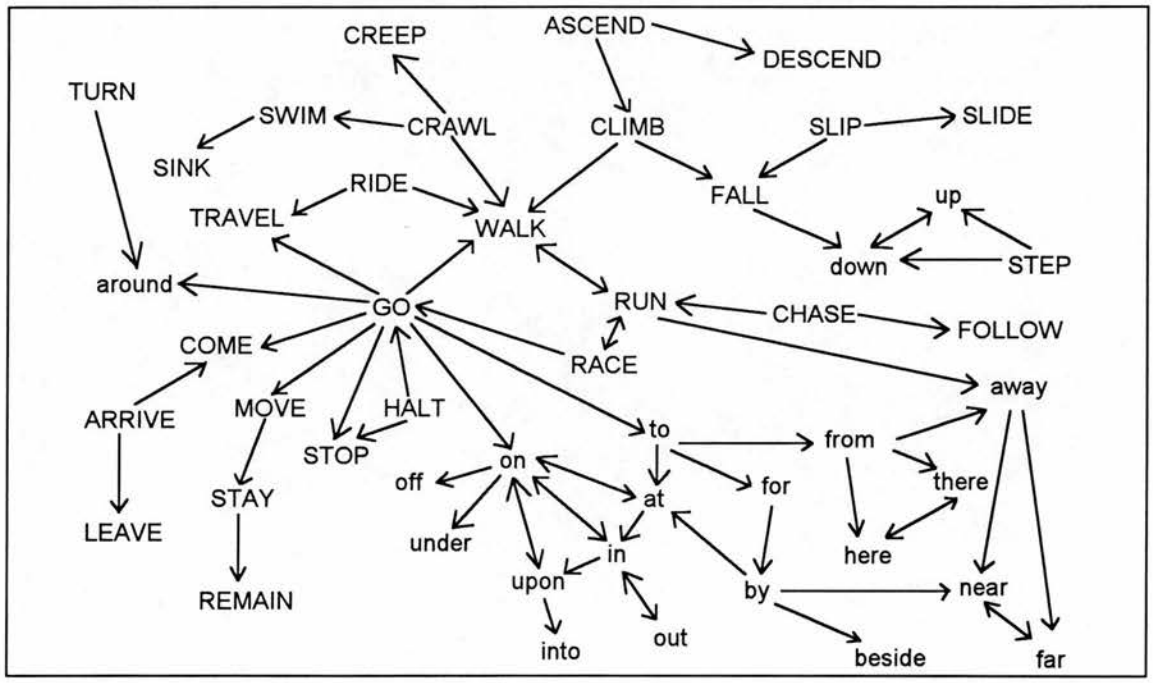


Figure 3.5: Associative links between a subset of motion verbs and prepositions (based on data in Deese 1965)

Cruse (1986) comments that it is not altogether surprising that hierarchies consisting of unattached verbs should fail to display the kind of tight semantic structuring shown by hierarchies of nouns:

[14] It must be remembered that Deese provides data for only a limited number of items and that he uses a fairly restricted range of subjects — American (mostly male) college students.

> It appears to be a property of predicative terms such as verbs and adjectives that their meanings are context-dependent to a much greater degree than are those of nouns; their meanings are, in fact, dependent in various ways on those of closely associated nouns. There is therefore an extra measure of indeterminacy about the meaning of a verb or adjective out of context. (Cruse 1986: 152)

According to Fillmore (1978), it is reasonable to suppose that semantic domains can be organized in a number of different ways (with the corollary that word meanings can be described in different ways). However, he does suggest that the 'frame' provides a kind of basic structure which might then contain various sub-structures.

We have already seen that the SOURCE-PATH-GOAL schema provides an appropriate frame for the semantics of locomotion. All the component parts of the schema are shown in Figure 3.6, which derives from Talmy's analysis discussed in 3.2 3 above. The diagram could be said to summarize the analytic model used in this research.

FIGURE/MOTION	PATH	GROUND	MANNER
Human	*from*	Source	medium instrument mode velocity impetus energy time distance noise etc
	to	Goal	
	via	(intermediate)	
	along/'alength'	— /Source/Goal	
Self-agentive	Path-neutral	—	

Figure 3.6: The components of a motion event (based on Talmy 1985)

The thicker line surrounding the three columns on the left indicates the components of the motion event itself. Since we are concerned with human locomotion, the Figure is human and the Motion self-agentive (though certain items in our field like *slip* and *fall* are not strictly self-agentive). The Path elements are paired with appropriate Ground elements. This is straightforward in the case of From (Source), To (Goal) and Path-neutral, but the other two require some clarification.

As we saw in 3.2.3.1, Type III involves an intermediate Ground object which is neither source nor goal. Type IV has two sub-types: the first (a), represented by *along*, is movement for a distance along an unbounded extent, with the Ground not always specified; sub-type (b), represented by *'alength'*, is movement along a bounded extent whose endpoints need not be specified either, but in the case of movement FROM-ALONG and ALONG-TO, the source and goal respectively are specified (see the examples given in 3.2.3.1, note 11).

For Manner, the component outside the motion event itself, a list of possible dimensions is given. As Jackendoff indicated (see 3.2.3.3) and as we observed earlier in this section, it is impossible to decompose Manner verbs satisfactorily. The list is simply meant to indicate different ways of looking at the features encompassed by Manner rather than an attempt at classification. Thus *walk*, *run* and *crawl* specify different modes of locomotion; *hobble* and perhaps *stump* might suggest the use of an instrument such as a walking stick; *wade* indicates movement through the medium of water; *dash* and *stroll* are well apart on the scale of velocity; *amble* and *march* are contrasts in energy; *scurry* suggests movement over a short distance, *hike* and *trek* a much longer distance; *tramp* suggests a noisier kind of movement than *slink*; and so on...

3.3.2.1 Contrastive relations

In this sub-section we shall consider the possible contrastive relations which can be observed in the sub-domain of locomotion, forming sub-structures of their own. As we saw in Chapter Two, these relations, thanks to the work of Lyons (1977) and of Cruse (1986), can now be categorized in much more detail than before, although a good deal inevitably remains unclear.

The overall class of opposites is not, as Cruse says, a well-defined one and a large number of opposites do not lend themselves to significant generalizations. He proposes that a binary directional opposition must form part of the meaning of any pair of opposites and that the more patent this part of the meaning is the more prototypical a pair of opposites will be (Cruse 1986: 262).

The simplest type of opposition is that of complementaries, which exhaustively divide a conceptual domain so that there is no neutral ground between them. Such an opposition seems to exist between the positional adverbs *inside* and *outside*, as well as the pair of verbal opposites *stay* and *leave*.

Antonyms, in the restricted sense defined by Lyons, are fully gradable opposites which are symmetrically disposed around the neutral region of a scale; this neutral region cannot be referred to by either member of the pair. In our lexical field, *fast* vs. *slow* and *near* vs. *far* are clearly antonyms, although as adjectives they do not appear on our list. Cruse would further specify them as polar antonyms, which are objectively descriptive in terms of an underlying scale of conventional units.

Reversives are directional opposites in a more literal sense because they denote motion or change in opposite directions: *rise* vs. *fall*, *ascend* vs. *descend*, *advance* vs. *retreat*, *enter* vs. *leave*, *embark* vs. *disembark*.

Converses, however, involve syntactic reversal of the arguments required by a predicate and allow variation in the Figure/Ground relationship within the same geometric relation: *front* vs. *back*, *above* vs. *below*, *in front* vs. *behind*.

Deictic opposites should perhaps be put in a class of their own. In our field we have *come* vs. *go*.[15] Fillmore (1971/1983) has attempted to spell out in detail the underlying assumptions in the use of *come* and *go*. The interlingual validity of these assumptions is of great interest from the point of view of the present study. Coseriu (1975), for example, points out the different usage in 'come' and 'go' verbs between French, Italian and Catalan on the one hand and Spanish and Portuguese on the other. The first group of languages are similar to English in that the 'deictic space' is seen from the point of view of either Sender or Addressee (to use Fillmore's terms), whereas in the second group it is from the Sender's point of view only. Thus the English sentence *He will come to see you*, said over the telephone, could not be translated literally into Spanish or Portuguese.

3.4 Summary

This chapter has examined the semantics of locomotion in some detail. The key role of spatial relationships was discussed in relation to the work of various linguists; the cognitive approach of Talmy was found to be the most thorough and convincing. This judgement was also extended to his treatment of motion events and his typology provides the framework for the research programme. An inventory of verbs and particles in the English lexical domain of locomotion

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[15] *Here* vs. *there* would also qualify if we were to include all relevant adverbs.

was presented and some aspects of this domain were investigated, especially the problem of characterizing the semantic content of manner verbs and the role of contrast in the structure of this lexical domain.

We have now covered the theoretical background to the study and are ready to deal with the immediate context of the research, its design and its implementation.

Part II

Research Context and Design

CHAPTER FOUR

THE FIELDWORK CONTEXT

In attempting to elucidate the role of the first language in second language lexical organization and use, this study will look at the lexical usage of learners of English who speak different first languages. As explained in the Introduction, the country chosen for the fieldwork was Kenya, where the researcher had had substantial teaching experience. Before describing the study design (Chapter Five), it is important to establish the linguistic and sociolinguistic background. The first part of this chapter will therefore consider the linguistic situation in Kenya and the role of English in Kenyan society as a whole as well as in education. The second part will examine the three Kenyan languages selected for the study, giving a brief overall description and a more detailed account of the treatment of the semantic domain of locomotion in each of them.

4.1 Language in Kenya

As a political entity, Kenya—which has been an independent state within the Commonwealth since 1963—came into existence during the final phase of nineteenth century imperialism. Several indigenous language groupings are represented in this entity (see Figure 4.1). Exactly what these groupings are and how to label them are questions which have been the subject of considerable controversy, but the currently accepted view sees three principal groups of languages represented in Kenya: Niger-Congo, Nilotic and Cushitic.[1] It is difficult to be precise about the actual number of indigenous Kenyan languages, because of the debatable status of many dialects, but there are certainly more than 35. The colonial administration introduced one exotic language, English, which was reinforced by the planting of European settlers, while immigrant labourers and traders from the Indian sub-continent added a number of others, principally Gujarati, Punjabi, Hindi and Urdu.

While English retains an official role in the independent state, it is Swahili, a Bantu language with partially Arabicized lexis, spoken as MT by some coastal

[1] Figure 4.1 shows a fourth grouping, Para-Nilotic, which is now regarded as part of Nilotic.

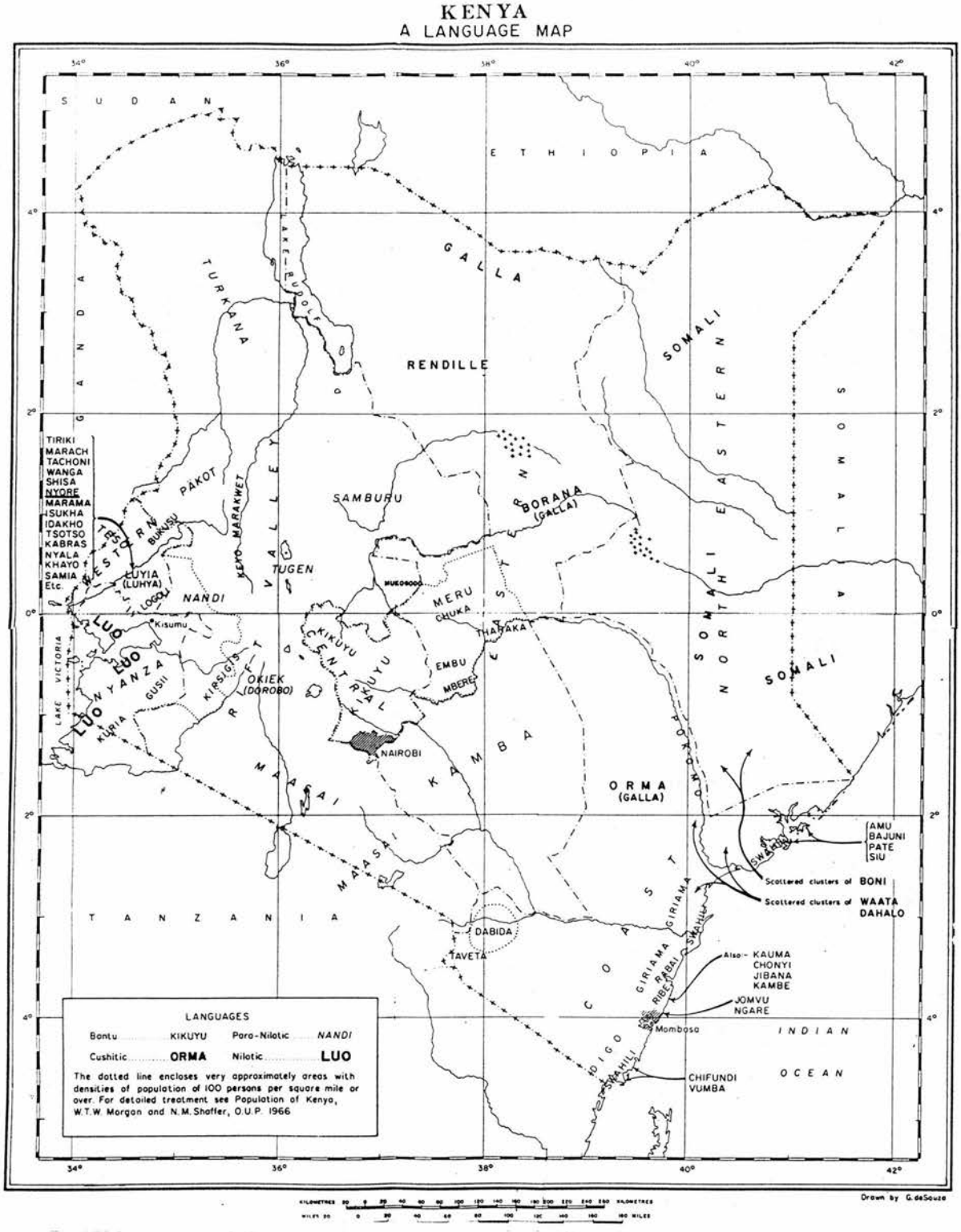

Figure 4.1: Language Map of Kenya (Whiteley 1974)

communities but widely used as a lingua franca, which is regarded as the 'national' language. English, however, is the medium of instruction at all levels of education above lower primary.

It is convenient to adopt Whiteley's (1974) distinction between 'local' languages, like Kikuyu and Luo, with restricted distribution patterns, and 'common' languages, which can be 'national' like Swahili or international like English (though Swahili is also to some extent an international language, with wide distribution as a lingua franca throughout East and parts of Central Africa).

4.1.1 A Multilingual Society

Kenya's population, according to the 1989 census, came to a total of 24 million. Its ethnic breakdown is shown in Table 4.1.[2] With such a diverse population it is not surprising that multilingualism is a common feature of Kenyan society, with trilingualism and even quadrilingualism not unusual, though levels of competence probably vary considerably outside restricted contexts. The Survey of Language Use and Language Teaching in Eastern Africa (hereafter SLULTEA) carried out between 1967 and 1971 found that the most frequent bilingual pattern was L1 + Swahili and the most frequent trilingual pattern was L1 + Swahili + English (Whiteley 1974: 48–51; see also Heine's figures cited below); it is likely that this is still the case. In such a situation it is not uncommon for the use of a particular language to be characteristic of a particular social domain (cf. Fishman 1971). The languages themselves take on the complex of emotions, loyalties and prestige associated with the domains themselves. Thus local languages tend to be linked with the rural homestead and with traditional values, while of the 'common' languages, Swahili is linked with town life, trade and low status jobs, and English with government service, the professions and high status jobs (Whiteley 1974: 1–2; see further 4.1.1.1 below). However code switching is frequent in multilingual communities and other large towns (see 4.1.1.2 below). Lexical borrowing is also heavy, particularly from English into Swahili and the local languages, and from Swahili into the local languages.

[2] The figures are from the 1979 census as the later census details have not yet been released. The percentages are not likely to have changed much in the ten years between them.

Table 4.1: Major ethnic groups in Kenya's population (1979 census)

Name	Size (millions)	Percentage
Kikuyu	3.2	20.9
Luhya	2.1	13.8
Luo	1.9	12.8
Kamba	1.7	11.3
Kalenjin	1.6	10.8
TOTAL POPULATION	**16.1**	**100.0**

There is no doubt that today Swahili is the predominant second language in Kenya, although there are differences between ethnic groups in their knowledge and use of it. On the basis of a survey he conducted in 1968, Heine (1970) concluded that Swahili is "by far the most important medium of communication in western and central Kenya". Of a sample of 1,350 individuals, the great majority (85.5%) used Swahili in one or other combination; the bilingual combination of mother tongue plus Swahili being the most prevalent one (see Figure 4.2).

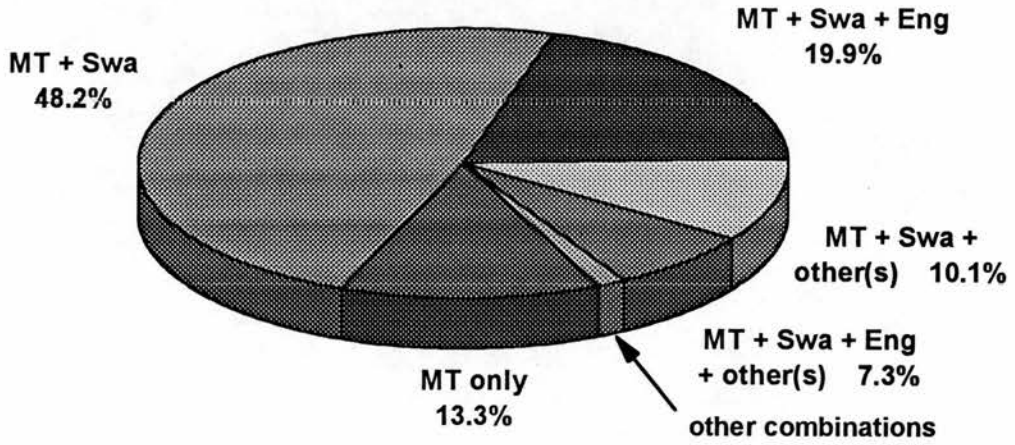

Figure 4.2 Types of language combination in western and central Kenya
(based on figures in Heine 1970)

4.1.1.1 Domains of language use

The association between language and social domain referred to earlier is worth looking at a little more closely. Domains may be defined as "*congruent* combinations of a particular kind of speaker and addressee, in a particular kind

of place, talking about a particular kind of topic" (Hudson 1980: 80, his emphasis). Thus a teacher and a pupil who are discussing a school subject in a school setting will have no difficulty in deciding which language to use. As Hudson implies, this combination of factors is prototypical of the 'school' domain, but if one of the factors is incongruent, as would result from moving the setting to the pupil's home, the choice of language becomes less clear-cut.

What are the relevant domains in the Kenyan context? Since Kenya is still largely a rural society—less than 20% of the population in the 1979 census was urban—we may take those suggested for rural Kenya by Whiteley (1974): the homestead, trade, church and workplace.

First, the homestead is, as already noted, the focus for the use of the local language. However, even if we qualify this, by allowing for the occasional use of English and Swahili, we fail to capture the complex interplay of factors which determine actual language use. Whiteley stresses the importance of such factors as the wish to exclude others (as when children use English in the presence of their monolingual parents), the need to reinforce status (using English to give added status to the user) as well as discoursal factors like shifts in the level of formality or the topic of discourse.

All the subjects in the studies to be described were asked to indicate the language or languages used at home. It is possible that some interpreted 'at home' to mean something wider than the homestead, but the overall results are probably fairly reliable and not all that surprising (see Figure 4.3, which does not show minor patterns). Almost 60% said that only the mother tongue was spoken at home, but the proportion was higher for the Nandi and much lower for the Lunyore speakers. The Nandi also had the smallest number of those claiming some use of English at home.

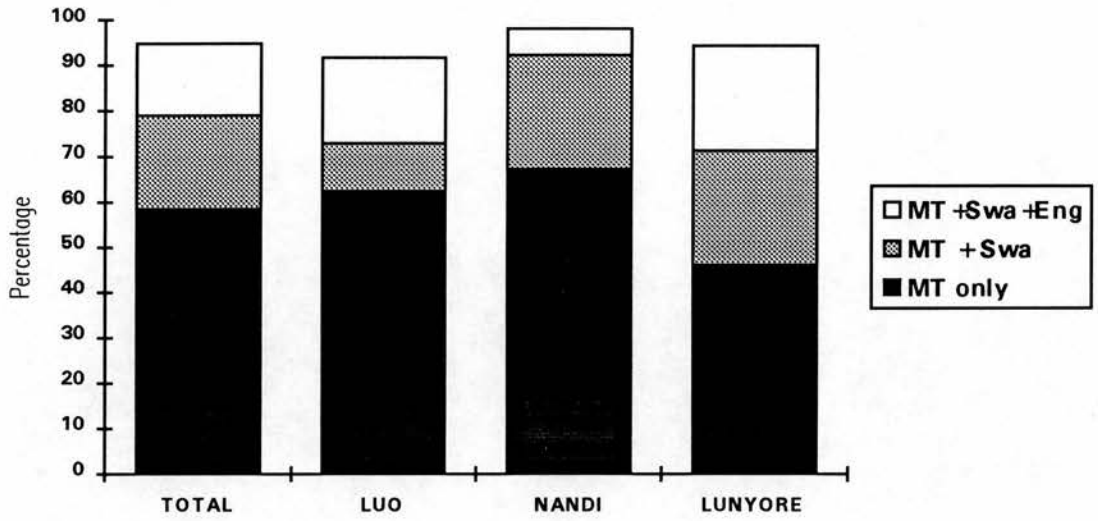

Figure 4.3: Home languages of subjects taking part in the present studies

Activities in the second of Whiteley's domains, trade, usually take place in settings which are linguistically highly heterogeneous and where a high level of education is not a prerequisite. Swahili is therefore the obvious choice for communication here. But the situation is complicated by the actual degree of heterogeneity and the dominance of particular ethnic groups in trade, though traders are usually quick to adjust to the linguistic environment.

For the church domain, the position is less clear. Whiteley's findings for SLULTEA were based on a questionnaire sent to missionaries and are almost certainly out of date. With far less reliance on foreign missionaries, the churches in Kenya probably make even more use of local languages, except in the case of linguistically mixed congregations, where Swahili is the likely alternative.

It is more difficult to draw any general conclusion about the domain of workplace, because of its inherent diversity. But for one particular type of workplace, government offices, Whiteley found a 'fairly clear pattern of usage': Swahili is used for communicating with the general public or with subordinate staff, while English is used for communicating with fellow officers or superiors. Language here is quite clearly a marker of status.

For social interaction with fellow Kenyans generally, "where the participants are from different language groups, the language used is commonly Swahili, at least until it is established that both parties are equally conversant with English" (Whiteley 1974: 344).

The typical trilingual Kenyan therefore has to be able to switch between the codes in his linguistic repertoire. Such switching can take place at any level from the lexical to the discoursal. Code-mixing and code-switching (the terms can be used interchangeably, but some authors, as we shall see, do make a distinction) have received considerable attention over the last two decades (see Kanwangamalu 1989 for a selective bibliography). Since it is a very common feature of the Kenyan linguistic scene, a brief review is necessary.

4.1.1.2 Code switching

Language alternance (Whiteley's term) represents one end of a continuum which extends through various types of code-switching to fully assimilated borrowing (and beyond that to include pidgins and creoles). Situational code-switching is another term for language alternance, and is contrasted with conversational code-switching (Gumperz 1977), where speakers change languages within the same discourse situation. Rather than making a purely linguistic distinction between *inter*sentential code-switching and *intra*sentential code-mixing (e.g. Bokamba 1989), it seems more useful to adopt Scotton's sociolinguistically-based markedness model (Scotton 1983; also Scotton 1988, Myers-Scotton 1989), which can incorporate both of these types.

In this model it is presumed that as part of his communicative competence (Hymes 1971), a speaker has a tacit understanding that, for a particular conventionalized speech situation in his community, a certain code choice will index a set of expected rights and obligations between the participants. This code will be the unmarked choice for that situation and can be identified empirically as the most frequent choice for a given exchange. As the situation changes, so may the unmarked choice. To take an example in the Kenyan context, for a teacher visiting a government office in Nairobi, Swahili would be appropriate for talking to the *askari* (security guard) at the entrance, but English would probably be used with the receptionist.

But in situations where the participants are bilingual peers, alternating between two codes may itself be unmarked. Each code is linked to a different social identity which is shared by the participants *and* positively evaluated by them, These conditions do not co-occur in all multilingual communities, but are certainly met in Kenya in many situations involving English, Swahili and a local language. An example from Myers-Scotton (1989, slightly edited) shows three-way switching:

A school principal from Western Kenya is in Nairobi visiting a friend who is an administrator at the Government Printer. Their conversation has been in their shared mother tongue, Lwidakho [a Luyia language related to Lunyore], when a telephone call interrupts them.

Administrator (ENGLISH, Lwidakho):	(on telephone) GOOD AFTERNOON. THIS IS GABRIEL. OH, ELIJAH. Mbulili uvele muwale uvira khulushi? ('How are you? I heard you were sick') YES, WITH HENRY. HE'S BEEN HERE ABOUT AN HOUR.
Administrator (ENGLISH):	(to Henry, the principal) WHEN ARE YOU RETURNING?
Principal (ENGLISH):	THE FIRST OF NEXT MONTH — BEFORE SCHOOLS REOPEN.
Administrator (Lwidakho, ENGLISH, *Swahili*):	(on telephone) Alatsya lisitsa lyukhura mu mweli muluya. ('He'll go during the first week of next month') YES, I'LL TELL HIM THAT. *Lakini, bwana, siku hizi huonekani. Umepotea wapi?* ('But, mister, you aren't seen these days. Where have you been hiding?')

This kind of three- (or two-) way switching — which participants may possibly not be consciously aware of — is very common in bilingual peer-group situations in Kenya, as any observer will soon notice. It is not only intersentential, as in the above example, but frequently also intrasentential, and does not appear to be subject to any universal syntactic constraints (cf. Bokamba 1989). The following examples from Scotton (1988) show English noun, verb and adjective forms embedded in a matrix of Swahili grammar:

kazi ya u-SECRETARY
'work of a secretary'

Unaanza ku-BEHAVE kama watu wa huko wa-na-vyo-BEHAVE
'You begin to behave as people from there behave'

...nikapata chakula nyingine iko GREY ni-ka-i-TASTE nikaona ina TASTE LOUSY sana
'And I got some more food that was grey and I tasted it and thought it tasted very lousy'

It has been suggested (Naval 1989) that, instead of syntactic constraints, there is a set of fundamental concepts—rather like the basic-level concepts of cognitive semantics (see 2.3.1 above)—which are always expressed in first-language lexis. This is an idea which deserves further investigation.

Code-switching may, on the other hand, involve a marked choice. This has the effect of changing the social distance in some way. A move from a common to a local language may signal solidarity among fellow-speakers of the local

language. On the other hand, a move in the other direction—to a common language—may indicate a desire to enhance one's status. Scotton (1988) gives an example from a rural committee meeting in western Kenya where the local language is the unmarked choice; a location chief responds to a complaint from a teacher about mismanagement of funds with an angry outburst in Swahili asserting his authority.

Finally, code-switching may be exploratory in situations where there is no obvious unmarked choice (but cf. Whiteley's remarks quoted in 4.1.1.1). This may often happen when meeting someone for the first time without knowing all the relevant social factors. For example, a young job-seeker enters the office of a Nairobi firm he has been referred to; he starts off in English, but the manager's insistent use of Swahili, presumably to underline the applicant's more lowly status, eventually forces him to switch to Swahili (Myers-Scotton 1989).

It is clear, then, that in a multilingual society like Kenya, the pattern of language use is subject to a wide range of sociological as well as psychological constraints. The 'typical' educated Kenyan, with his repertoire of local language, Swahili and English, has to be adept at exploiting his knowledge of all three in whatever way a situation demands. It is not easy for monolingual speakers to understand how this really works.[3]

4.1.2 Kenyan English

The vexed question of what constitutes a non-native variety of English will not be gone into here (see Kachru 1986). Instead we will assume that the term language variety, like many other terms in linguistics, is a 'useful fiction' (Algeo 1991).

Variation between language users occurs at all linguistic levels: phonological, morphological, semantic and syntactic. Phonological variation is the one that tends to get most attention from other language users. Thus native speakers usually have little difficulty in identifying an accent as that of an

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[3] In recent years a new language phenomenon has developed in urban areas, particularly Nairobi. This is Sheng—on one interpretation a pidgin—which is popular among schoolchildren and young people generally, and perhaps originally a marker and reinforcer of age group identity rather than a means of inter-ethnic communication. Swahili provides the grammatical framework, but vocabulary is drawn from a number of languages spoken in Kenya, especially English, Luo and Kikuyu as well as Swahili (Kimani 1985; Okoth Okombo n.d., Kembo Sure 1992).

African and, with practice, can often further specify whether it is an East African, if not a Kenyan, or (even more specifically) say, a Kikuyu voice. This is largely because of the way in which the English vowel system has been simplified.

Our main concern here will be with semantic and syntactic variation (which includes lexis). Although the examples to be cited (derived from Hocking 1974, Hancock and Angogo 1982, Zuengler 1982 and the researcher's own files) are characteristic of Kenyan English, they reflect wider trends that can be found in other parts of East Africa, the Bantu-speaking area and sub-Saharan Africa generally. It should be emphasized, however, that they do not occur at every lectal level; their distribution from basilect to acrolect awaits investigation. The categories under which they are listed are substantially those of Bokamba (1982).

The omission of function words, especially articles, is a very common feature, e.g. *District Development Committee will meet on Thursday.* Phrasal verbs are often used without their particles:

I picked him outside his house and he dropped at work.

The victim had been knocked by the lorry.

On the other hand, some verbs take *with* much more frequently than they do in British or American English:

I'm going to stay with this dress... ['keep']

Go with this and give it to Mr Mjinga. ['take']

Don't forget to come with your pencil as well. ['bring']

Reach is often used with *at*, e.g *I reached at school very late.*

The count/mass distinction is made differently in African languages and learners get the impression of English being semantically inconsistent in this area. Not surprisingly, forms such as *an advice, informations, a land* (for plot of land), *furnitures* are common. Some words which are plural in form are treated as singular, e.g. *behaviours, laps, minds.*

The clause structure of Bantu languages allows for topic subjects and leads to this kind of English sentence:

Women, once they are educated, some people say that they are harsh and proud.

An independent subject pronoun is also frequently interposed between a subject noun and the verb:

My daughter she is attending the University of Nairobi.

Relative clauses have resumptive anaphoric pronouns:

There are certain people who, if they are not able to have their own way, they refuse to co-operate.

...a certain road, which I always cross it on my way to school

Other deviations from Standard English occur in the regular use of affirmative answers to negative yes/no questions and in the expression of comparisons, particularly the omission of *more* or *-er*:

— Hasn't the President left for Nairobi yet?
— Yes, he hasn't left yet.

This kind of cell is plentiful near the outside of the leaf than inside it.

Semantic deviations form "perhaps the most interesting and dynamic area in which African English shows its creativity" (Bokamba 1982: 86). They may be grouped into six categories according to their mode of formation: loanwords, calques, extensions, shifts, transfers, coinages.

The most widespread loanwords in Kenyan English come from Swahili. They occur mainly in such semantic fields as food and cooking, e.g. *ugali* (boiled maizemeal), *sufuria* (aluminium cooking pot), *sukumawiki* (a type of green vegetable); agriculture and the rural environment, e.g. *jembe* (hoe), *panga* (a cutting tool), *shamba* (a cultivated plot); social relationships, e.g. *baba* (father or older relative), *mzee* (elder), *mwalimu* (teacher); politics, e.g. *wananchi* (citizens), *uhuru* (independence), *baraza* (official meeting).

Calques or loan translations are also usually derived from Swahili, as in the following examples. *Hear* (*sikia* in Swahili) is sometimes used for both 'feel (a pain)' and 'understand (a language)'. *Be careful of that man; he is dishonest and he can cheat you* reflects the influence of the Swahili verb *weza,* which has a different coverage to the English *can. Have you got fire?* is usually a request for a cigarette lighter or match. *Sweet* may be used to describe the quality of a piece of meat. *I need to help myself* is a common euphemism for going to the toilet.

Semantic extensions, shifts and transfers are very common and not always easy to differentiate. A semantic extension occurs in the case of *produce* being used to refer to childbirth: *She has produced twins*. Another example is in the

use of *stay* not only for holidays and short trips but for regular residence (as in Scottish English): *They stay in Nairobi.* It is also interesting to see that while *get* in the sense of 'receive' is not perhaps as widely used as it is in British or American English, it is extended to mean 'meet' and 'find':

At the school gate I got the headmaster.

They reached the place and got that the man had left.

Semantic shifts involve a change in the prototypical concept associated with a word. Sometimes formal or technical terms are used instead of the more common ones, and this is often interpreted as a case of register extension. Thus *Ladies* and *gentlemen* are freely interchangeable with (or preferred to) *women* and *men. Alight* is much more frequently used for getting off a bus, indeed for leaving any vehicle, than it is in British or American English. *Escort* is another much-used verb for walking together with someone else: *My friend escorted me to the market.* A different kind of shift is to be seen in *I walked slowly on foot* (cf. the discussion of walking in 3.2.1).

Semantic transfer involves the complete reassignment of the meaning of a word; however, such a change is usually not very far removed from the original sense or can be linked to it metaphorically. Thus *befriend* is used in the sense of being someone's friend; *substitute* is used for *replace.* It is not surprising that an idiomatic phrase like *by all means* should be used more literally: *We are trying by all means to increase our profits.* A few more examples of transfer follow:

His answer made me to know *he was not being sincere.*

I met him in August last year. By then *he was still teaching at Kamusinga.*

In case *he calls, I'll come and speak to him.*

Finally, we come to deliberate coinages, where the derivational morphology that is so characteristic of African languages is clearly an influence (Bokamba 1982: 88). Affixation, reduplication and compounding are applied to nominal verbal, adjectival and adverbial forms. As in any language, coinages—often highly colloquial—may be short-lived or localized, but some do catch on and are used more widely. The expression *slowly by slowly* ('take it easy') shows the reduplication which is a common feature of Bantu languages, also seen in

small small whisky. Other examples of coinages are: *tea sieve,* 'tea strainer', *off head,* 'by heart',[4] *mono,* 'first-form student',[5] *be on tarmac,* 'seeking a job'.

This brief description does no more than give a flavour of Kenyan English. While all the features noted have been observed in the speech (and to a lesser extent in the writing) of Kenyan users of English, it should be stressed again that they do not all necessarily form part of every user's idiolect. Although there is general recognition of the existence of a Kenyan variety of English, it has no official status and there is as yet no deliberate policy of teaching it in the schools (cf. Okoth Okombo 1986). It is to the language situation in the schools that we now turn our attention.

4.1.3 Language in education

The history of language policy in the Kenyan education system (see Gorman 1974 for a detailed account) is full of inconsistencies and false starts, at least for much of the colonial period. Local languages, Swahili and English have all been promoted at various times and by various agencies. The result has been a somewhat fluid trilingual system.

The principle that the mother tongue is best for the early stages of education was frequently endorsed during much of the colonial era, in sharp contrast to the policy adopted in the French and Portuguese colonies. But there was no clear policy until 1949 as to which local languages were to be used at specific stages in the educational system, and even then the selection was unrealistic (Gorman 1974a). The teaching of these languages was hampered by a shortage of written material. This in turn was the result of several factors (Gorman 1974a: 451, note by Whiteley). There were problems of orthography and language standardization (see 4.2.1.2 and 4.2.1.3 with reference to Kalenjin and Luyia). It was the missionaries who were generally responsible for introducing written forms but the different missionary groups were not always in agreement. Furthermore, since these were essentially spoken languages with no written tradition, there was little incentive to produce materials which would only be used in the lowest classes of primary school. Some materials were later developed, such as the T.K.K. series in fourteen languages (see Gachukia

[4] The process of learning by heart is commonly referred to as *cramming.*

[5] Known as an *office rat* at a school where the present writer taught.

1970), but the teaching of local languages remains limited to the lower primary classes.

The use of Swahili in the educational system had been promoted by some of the missionaries and also by a number of directives from the colonial government. However, by the 1940s there was a growing trend to replace Swahili with English. From 1953 English became the compulsory medium in all primary school-leaving examinations. Consequently, by the late fifties it could be observed that Swahili was no longer taught widely in primary schools (Perren 1958). As part of the 'New Primary Approach', English was designated as the medium of instruction right from Primary I. When, after independence, Swahili was actively encouraged again as the language of nation-building, there was much ground to be made up. Swahili is now taught throughout the educational system, but the cumulative effect of years of neglect in terms of resources, personnel and time allocation continues to frustrate the efforts of planners to promote it.

The home language in rural Kenya is, as we have seen, almost always the local language and access to Swahili is mostly confined to listening to radio programmes, reading newspapers or listening to people at the local market or commercial centre. It would not be surprising, therefore, if Gorman's (1974b) findings were still valid: from a test of Swahili vocabulary conducted in 18 secondary schools, he came to the tentative conclusion that pupils' lexis was just sufficient to handle shopping, farming and school activities (and possibly to understand political speeches) but was quite inadequate to describe natural scenery, physical appearance or, more disturbingly, symptoms of illness. Unfortunately Gorman did not carry out a parallel test of English vocabulary (he tested reading comprehension instead) but one may surmise that similar, though not identical, gaps would be found there.

Language use in schools thus reflects the triglossia which is typical of Kenyan society generally (Whiteley 1973). The role of English as the medium of instruction is quite clearly crucial. Progress through the educational system is largely dependent on proficiency in English. Nevertheless, despite the leading role accorded to it and the bias in resources towards its teaching, English in schools continues to be beset with problems.[6] The teaching of the

[6] The Ministry of Education, with some assistance from the British Council, has since 1988 organized a new nation-wide in-service programme to improve the standard of English teaching in the country (see Schmied 1989).

subject in secondary schools, once dominated by British and American expatriates, is now entirely in the hands of Kenyans, many of whom were, however, trained as literature rather than as language teachers. The changeover from native speaking to non-native speaking personnel has been followed by a huge expansion in the education system, especially at the higher stages, while outside social factors, such as rising unemployment among school leavers and shifts in the balance of prestige between Swahili and English language use (see 4.1.3.1 below) also play an important part. The restructuring of the educational system into an 8–4–4 pattern (eight years of primary, four years of secondary and four years of university education) is now complete (though shortage of places means that the majority do not go further than primary school) but the effect of this on the teaching and learning of languages has yet to be assessed.

Finally the emergence of Kenyan English as the established local variety adds another dimension, as it is this variety which is now the immediate model for learners of English in Kenya, who are likely to have little or no contact with native speakers.[7]

4.1.3.1 Attitudes towards learning English

Among the factors likely to influence motivation to learn a second language, Stern (1983: 328) stresses the social status of the second language in relation to the first, ethnolinguistic group relations and economic or political factors. The earlier discussion has already made clear the high social status of English in Kenya and, although they have not been treated here, political and economic factors also tend to work in favour of English. With regard to group relations, Stern mentions a number of studies which have confirmed that people have strong feelings about their own language or language variety and relate it cognitively and affectively to other languages or language varieties (Stern 1983: 237).

In strictly psychotypological terms (see 1.4.1), English in Kenya would be regarded as remote from the indigenous languages, though the increasing domestication of English and the appearance of phenomena like the pidgin Sheng (see note 2 above), has moderated this to some extent. Swahili is certainly perceived as much closer, particularly by speakers of other Bantu

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[7] Kachru (1991) puts the point in a more general context: "the input for [L2] acquisition, the model to be followed and the speech strategies to be followed are provided by the peer group, the teachers and the media" (Kachru 1991:6-7). See also note 9.

languages like Lunyore, though to a lesser extent by speakers of Nilotic languages, such as Luo and Nandi. What of the affective dimension to distance? Faerch and Kasper suggest that

> advanced L2 learners may feel a need for marking linguistically that they do not belong to the L2 speech community; they might want to express the fact that they cannot identify with certain aspects of the target culture, or they may feel, in some contexts, that they gain prestige by making their foreign-ness explicit. (Faerch & Kasper 1986:63)

However a recent study of the attitudes of 80 teacher trainees in colleges in western Kenya (Kembo Sure 1989) shows that English is increasingly being accepted as a Kenyan language. The subjects did see an important role for Swahili as an inter-ethnic language, but there was general agreement that complex concepts could be expressed more easily in English and that English was needed to keep up with world-wide developments in science and technology.[8] Since they were all going to be secondary school teachers, it is noteworthy that over 60% considered that mixing English and African languages was a useful way of explaining difficult ideas in class.[9]

Whatever the long term future of English in Kenya may be, there is no doubt that in one form or another it is going to be an important part of the linguistic scene for some time to come.

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[8] Kembo Sure's study also confirms that local languages are still strong in the home setting. Nevertheless, it also provides some evidence that English is gaining ground as a home language between siblings. Local languages also seem to be used much less in public places.

[9] In a recent study of codeswitching in Kenyan primary school classrooms (Merritt *et al.* 1992), it is claimed that teachers are teaching the prevailing patterns of multilingual use by presenting codeswitching as the unmarked choice. Primary teachers may often say the same thing three times—in English, Swahili and the mother tongue of the pupils.

4.2 Three Kenyan languages

Three Kenyan languages were selected for the study with a view to having three groups of subjects whose first languages were not closely related and that might reasonably be considered to have distinct semantic systems. Ideally they would have come from each of the three language families represented in Kenya — Niger-Congo (Bantu), Nilotic and Cushitic. While it would have been comparatively easy to find adequate numbers of subjects from all three families in the larger towns, especially Nairobi, the multilingual urban environment would maximize the effect of cross linguistic factors to an extent that might seriously distort the results. In order to reduce the effect of these factors, subjects were selected from educational institutions that were either in or fairly close to their home areas.

Practical reasons led to the choice of Western Kenya as the site for the fieldwork, the major one being that it was the area in which the researcher had taught for a number of years and which was therefore familiar to him. In this part of Kenya, speakers of Bantu and Nilotic languages live in close proximity. The Nilotic family is represented by members of all three of its main branches, only two of which concern us here, the Southern and the Western. The affiliations of the three selected languages are shown in Figure 4.4.

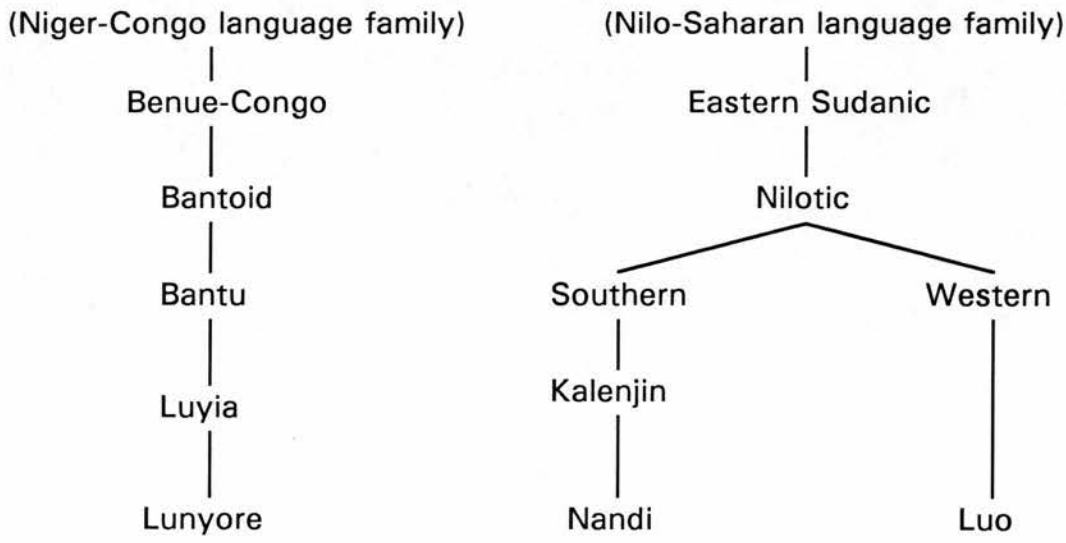

Figure 4.4: Affiliations of Lunyore, Nandi and Luo

It can be seen that while Luo and Nandi are distantly related, Lunyore has no connections with either of them. This is partly reflected in the distribution of linguistic features among the three (Whiteley 1974). Thus Lunyore, like all

Bantu languages has a system of genders distinguished by prefixes, but Luo and Nandi have no grammatical gender. Both Luo and Nandi make distinctions for aspect in the verb, but Lunyore has a wealth of time-linked tenses. Lunyore also uses lexical tone; it has a five vowel system, while both Luo and Nandi distinguish five open and five close vowels. However Lunyore shares with Luo a characteristic S-V-O word order, unlike Nandi with V-S-O.[10]

The following sub-sections will look briefly at each of the languages in turn, concentrating on those aspects that are relevant to this study. There will be no attempt to give a comprehensive description of their grammars and little will be said about their phonology, although it should be mentioned that all of them, Luo and Nandi in particular, have strong tonal characteristics with grammatical as well as lexical significance. However, the standard orthographies of the three languages, which will generally be followed here, do not indicate tonal features or certain significant vowel qualities, such as 'hard' and 'breathy' voice in Luo and Nandi.

The two sources of information I have drawn upon are published linguistic descriptions and native speaker informants (see note 4 in the next chapter). The published material[11] is rather scanty and is particularly limited in the area of semantics: in African language studies more attention has been given to phonology and morphology. All of my native speaker informants were multilingual (i.e. at least L1 + Swahili + English) and had been educated in English-medium institutions. The earlier discussion of code mixing (see 4.1.1.2 above) has shown how intimate the co-existence of two or three languages in a speaker's repertoire may be. The interweaving of different languages' semantic systems may be hard to disentangle. The influence of English on the usage of local languages by bilingual speakers may well be greater than that of the local languages on English, but it has not been much studied. In one of the rare discussions of this type of phenomenon, Ansre (1971: 163) concludes that, as far as West African languages are concerned, the influence of English "pervades all linguistic levels". My informants' judgements are inevitably

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[10] The prefix *lu-* at the beginning of Lunyore means 'language'. In many Bantu names such prefixes are frequently dropped by writers in English: thus, Luyia instead of Luluyia, Swahili for Kiswahili, etc. The prefix is retained in the case of Lunyore simply for euphony.

[11] Printed texts in these languages are largely restricted to religious and (lower primary) pedagogical material. I have drawn on standard Bible translations for some of my examples.

coloured by their knowledge of English, but it is difficult to be certain about where this occurs.

4.2.1 The speakers of the three languages

4.2.1.1 Luo

The Luo language, or Dholuo, is spoken by nearly 3 million people, the majority of whom live on the north eastern shores of Lake Victoria in Kenya's Nyanza Province, but some across the border in the Mara and Musoma Districts of Tanzania. There are also large numbers of Luo speakers living in most Kenyan towns, especially Nairobi and Mombasa. Dialectal variations are fairly small.

As a Western Nilotic language, Luo is related to languages spoken in Uganda such as Acholi, as well as to those of the Southern Sudan like Shilluk; speakers of these languages share a number of cultural characteristics derived from a common heritage of nomadic pastoralism. But for several generations now Luo have led a settled existence as farmers and fishermen.

4.2.1.2 Nandi

Nandi is spoken by about half a million people who mostly live in Nandi District of Kenya's Rift Valley Province. The Nandi people put up a strong resistance to the imposition of British colonial rule; the prominence which this gave them may have been responsible for the earlier use of 'Nandi'—by missionaries as well as administrators—as a cover term to include people who spoke languages and dialects related to Nandi, such as Kipsigis, Tugen and Pokot. The Nandi language was in fact the first of these to be given a written form.

The term 'Kalenjin'[12] came into general use as a more acceptable label for these peoples and languages in the 1950's, when smaller ethnic groups with a common background were coming together to form larger groupings (Kipkorir 1985; cf. the Abaluyia in Western Province—4.2.3). The languages spoken by the Kalenjin fall into at least three distinct groups and mutual intelligibility does not extend beyond a group and may not even cover a whole group

[12] The word means 'I tell you' in all the languages.

(Rottland 1982). A Nandi will therefore find it extremely hard to understand more than one or two other Kalenjin dialects (Kipkorir 1985).

4.2.1.3 Lunyore

Lunyore is one of the Luyia[13] group of languages or dialects spoken in Kenya's Western Province, which have a total of over 3 million speakers, making the Abaluyia (i.e. the Luyia people) the second largest ethnic group in the country. Lunyore itself may have as many as 400,000 speakers.[14] They live in an area with one of the highest rural population densities in Kenya; many Lunyore speakers have migrated to the towns.

There are 16 or 17 forms of Luyia, which can be grouped in various ways and called either languages or dialects. The northernmost dialect, Bukusu, and the southernmost, Maragoli, are so far apart as to have little mutual intelligibility. Despite the efforts of the Luyia Language Committee, set up in 1941, there remain at least three written versions of Luyia. One of these, 'Standard Luyia' is based on a number of central dialects which do not include Lunyore. The standard orthography does not represent the phonology of Lunyore with complete accuracy and will therefore be used here with modifications; the differences are not, however, extensive.

4.2.2 The lexicalization of locomotion in the three languages[15]

4.2.2.1 Luo

Normal sentence order in Luo, as already indicated, is S-V-O, e.g. *Atieno tedo rech*, 'Atieno is cooking fish'. A pronoun subject — often contracted to a prefix — usually precedes the verb stem, which is uninflected for person, except as regards tone. Temporal reference is essentially represented by time adverbials such as *nyoro* 'yesterday', *nene* 'long ago', *nende* 'earlier today', *chieng* 'some time to come' (Omondi 1981). These temporal markers occur just before the verb:

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[13] This is the spelling adopted by the Luyia Language Committee. However, Luhya seems to be the more commonly used form. The name means 'fellow clansmen' and has been in general use since about 1940 (Bryan 1959).

[14] Projecting from earlier estimates quoted in Itebete (1974). Census returns do not differentiate between the different forms of Luyia.

[15] In all the glosses of examples from the three languages, *he* is used for convenience to indicate third person singular forms that make no gender distinction.

Atieno nene tedo rech.
Atieno long-ago cook fish
'Atieno was cooking fish'

Auxiliaries are also used for temporal reference, e.g *abiro chame*, 'I shall eat it' (literally 'I come to eat it').[16]

In the lexicalization of motion, Luo uses a number of syntactic patterns. The pattern of Manner Verb + Path particle resembles that of English:

Ochung malo
he-stand up
'He stood up'.

Ne oriyore e kind ji
he-push in between crowd
'He pushed his way through the crowd'

The Path element may be expressed by a second verb, sometimes linked to the first by a conjunction:

Oringo kodok
he-run and-go-back
'He ran back'

Ne olak ka odok e yoo
and he-crawl and he-go-back to road
'He crawled back to the road'

Oringo odhi nyime
he-run he-go ahead
'He ran ahead'

Luo appears to have almost as many Manner verbs of movement as Path verbs,[17] though some can be used in either a Manner or a Path sense. For example, DAR has a primary sense of migration — to leave one place of residence with your household property for another place (rather like the Scottish use of *flit*)—but it can also be applied to running very fast . Another verb, NG'ADO, with a basic meaning of 'cut', is regularly used for crossing a surface, often with the addition of a general verb of motion to indicate the Goal:

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[16] In the Luo examples that follow, where the past tense is used in the English version, it has to be assumed that time adverbials have already established the temporal reference in the preceding discourse.

[17] It is the only one of the three languages to have a single verb to cover the meaning of 'jog' (YONG'O); its primary meaning would seem to be 'run more slowly because of tiredness'.

Wang'aduru nam, mondo wodhi loka cha
let-us-cross lake, so-that we-go side other
'Let us go across to the other side of the lake'

MOL is a Manner verb which is sometimes used to translate 'crawl'; its basic meaning refers to the movement of liquids, so a literal translation of *omol* would be something like 'he oozed'. One Luo Manner verb BAYO, roughly corresponding to 'stroll' is similar in form and meaning to the Lunyore verb (OKHU)BAYA; it is presumably a loan word in one of the languages, probably Lunyore.

The verb WUOTHO has a general sense of locomotion but is the normal equivalent of 'walk' (cf. the earlier use of GO in English, section 3.2.1):

Owuotho e puothe mag ngano
he-walk in middle fields corn
'He walked through some cornfields'

Ohero wuotho gi lewni maboyo
he-love walk with robes long
'He loves to walk around in long robes'

...nowuotho e kind Samaria gi Galili
and-he-walk in between Samaria with Galilee
'He was travelling through Samaria and Galilee'

The most general verb of locomotion is DHI. It almost always indicates movement away from the speaker's point of reference. In the following example it gives the sense of the English preposition 'to', in deictic contrast with the verb AA ('leave'), corresponding to 'from':

Josef bende owuok oa Nazareth e piny Galili modhi piny Judea
Joseph PAST he-leave he-go-from Nazareth in land Galilee to-go-to land Judea
'Joseph went from Nazareth in Galilee to Judea'

Another common verb, corresponding in many of its senses to 'pass' (see Figure 4.5 below), is KALO (alternative form—KADHO):

...ngamia kadho e wang' sandam
camel he-pass in middle needle
'a camel to pass through the eye of a needle'

Okadho akadha e kindgi
he-pass and-pass in between-them
'He walked through the middle of the crowd'

It may sometimes be used to express the sense of the English preposition 'cross':

Ochikore okalo bugo
he-jump he-cross ditch
'He jumped across the ditch'

As seen in several of these examples, a number of spatial prepositional expressions are formed with *E*: *e kind* 'between', *e nyim* 'in front', *e ng'e* 'behind', *e iye* 'inside', *e bwo* 'underneath'. We have also noted the use of verbs in this connection, which may further be illustrated by *kodok chien*, (derived from *dok*—'go back'), meaning 'backwards', and *kochomo piny*, (derived from *chomo*—'approach'), meaning 'downwards'.

Luo has directionally determined verbs for climbing (IDHO 'go up' and LOR 'move down') as well as a specific manner verb for the action (TWENYE). There are two verbs for jumping, CHIKRUOK and DUM; the latter seems to imply a greater height.

4.2.2.2 Nandi

Unlike the other two Kenyan languages in the study, finite sentence order in Nandi is verb initial, i.e. V-S-O:

Kitor chita saet
killed man buffalo
'The man killed the buffalo'

Sometimes the object is placed before the subject for emphasis, but the tone pattern indicates the case. Verbs can be marked for mood and aspect as well as tense (there are three tense particles). There are also many derivative verbs, mostly formed by suffixes which are in harmony with the stem vowel and which vary according to the tense:

til 'cut'
tilun 'cut this way'
tilden 'cut away'
tiljin 'cut for...'
tilen 'cut with...'

As these examples show, some extensions indicate direction, with or without motion. This morphological complexity in the verb eliminates the need for many prepositions in Nandi. Thus, Manner verbs of motion, which do not seem to be numerous in Nandi, are generally used with suffixes indicating direction and this can sometimes lead to quite complex forms, e.g. *kobibing'daegei*, 'he squeezed through' (>*bibing'* 'squeeze', *da* 'out', *egei* 'past'). These suffixes are also used to further specify the senses of Path verbs.

Among the few prepositions, ENG' (roughly meaning 'at') can be used in a variety of ways:

eng' kap Lagat 'at Lagat's home'

eng' boiboiyet 'happily' (literally, at happiness)

eng' oret taban 'at the road side'

eng' bitonin 'on the other side of the river' (literally, at across-water)

eng' sangutab 'outside' (literally, at place-outside).

WIY has a similar coverage to the Luo verb WUOTHO in that it has a general sense of movement as well as meaning 'walk'. There is also a general movement verb BA. But usually a specific Path verb is used. In the following examples, where Luo would use a single verb (WUOTHO), Nandi uses four different ones (BUN, SIR, BA and WENDOTI):

Kobun mbarenikab bek (bun)
he-passed in-fields corn
'He was walking through the cornfields'

Kingosirto (sirto > sir)
he-traverse-to
'He was walking along'

...che chamei kobendat kolaachi ngoroik che koen (bendat > ba)
who they-like they-go they-dress robes which long
'who love to walk around in long robes'

Kigeerot inendet kowendoti (wendoti)
he-saw him he-go-by
'He saw him walking by'

SIR is a locomotion verb with a range of traversal meanings (see Figure 4.5), corresponding to 'cross', 'jump' and 'pass' (in the sense of moving past, usually with the addition of the suffix -TOE). WIY is sometimes in deictic contrast with NYO ('come'). There is also a deictic contrast between the two verbs MANDE ('go out') and MANG'UU ('come out') where the position of the speaker is the determining factor, for example:

Sis, ak imong'u eng' inendet
be-quiet and you-come-out LOCATIVE him
'Be quiet and come out of him' (casting out an evil spirit)

4.2.2.3 Lunyore

Like all Bantu languages, Lunyore has a highly agglutinative morphology which gives rise to considerable structural complexity in nominal and

especially verbal forms. The verb root may be extended to a more complex stem by the addition of derivational suffixes expressing concepts such as causation, intensity, reciprocation etc. There are up to ten possible derivations but the actual number in use with particular verb roots is usually more limited.

Through the use of locative prefixes and the applied form of the verb (which is sometimes called the prepositional form), Lunyore makes do with hardly any prepositions as such.

Atsiile khusiro
he-went-APPLIED LOCATIVE-market
'He has gone to the market'

Atsiile munzu
he-went-APPLIED LOCATIVE(INTERIOR)-house
'He came out of the house'

Yelukha ingo
he-ran home
'He ran away from home'

Yelukhile mumasomo
he-ran-APPLIED LOCATIVE(INTERIOR)-school
'He ran to school'

As we saw with the other two languages, it is common to find two verbs being used in the lexicalization of motion, either both expressing different aspects of the Path or one expressing Manner and the other Path:

Khwambukhe khutsie injerekha
let-us-cross that-we-may-go-to other-side
'Let us go across to the other side'

Yanikila okhurula mumatsi
he-climbed to-go-out LOCATIVE(INTERIOR)-water
'He came up out of the water'

Belukha nibarula munyumba
they-ran and-came-out LOCATIVE(INTERIOR)-house
'They ran out of the house'

Lunyore has a verb resembling the Luo WUOTHO and the Nandi WIY. It is CHENDA and can mean 'walk', 'travel' or 'go for a visit':

Bayanza okhuchendachenda nibeefwalile ebiifwalo ebirambi
they-love to-walk-walk and-they-are-dressed robes long
'They love to walk around in long robes'

Yachenda mumatookho nende amataala
they-travelled LOCATIVE(INTERIOR)-towns and villages
'He travelled through towns and villages'

Batsie okhubachenda abeekho babwe
they-went to-visit-them relatives their
'They went to visit their relatives'

BIRA is another verb with wide coverage, similar to but not identical with the Nandi SIR. Its basic meaning is 'pass':

...nabiranga mwo
and-he-passed-CONTINUING LOCATIVE(INTERIOR)-it
'and he was passing through it' (i.e. the town)

Yabira mumikunda chobule
he-passed LOCATIVE(INTERIOR)-fields of-millet
'He was walking through some cornfields'

Olwa yali nabiranga narulayo...
while he-was he-passed-CONTINUING he-left-it
'He left that place and as he was walking along...'

There are two verbs, AMBUKHA and RUUMA, which roughly correspond to 'cross' and 'jump' respectively. However, the meaning of the first is really 'to go from one side of a valley to the other'; this may involve crossing an actual stream and could include the physical action of jumping over it. AMBUKHA would not normally be used for crossing a road or a field; BIRA would be used instead.

An approximate idea of the contrasting semantic coverage of this verb and a number of others already referred to in the three Kenyan languages and in English can be obtained from Figure 4.5, which is very tentative and limited to two dimensions.

Lunyore has specific verbs for getting up and leaving early (HUUNA) and for going to work (SAMULA). It also has a number of Manner verbs—such as ELOLA 'walk with pride', BAYA 'stroll' (see 4.2.2.1), HUTUMA 'stagger' and ENYOLA 'go stealthily'—which are normally used with an accompanying Path verb to indicate the direction of movement.

Luo	KALO		DUM CHIKRUOK
Nandi	BUN	SIR	
Lunyore	BIRA	AMBUKHA	RUUMA
English	PASS	CROSS	JUMP

Figure 4.5: Some verbs of motion in Luo, Nandi, Lunyore and English

4.2.4 Conclusion

It is clear that all three languages have several ways of expressing locomotion and use verbs with differing coverage of motion events. We need to ask whether there is, for each language, a prototypical lexicalization pattern, i.e. one which is, in Talmy's terms (see 3.2.3.2), colloquial in style, of frequent occurrence, and pervasive in its range of use.

From the evidence I have been able to gather, in all three languages Motion would seem to be typically conflated with Path. When Manner verbs are used there is usually an accompanying Path verb, either before or after the Manner verb. Luo and Lunyore sometimes use Manner adverbials instead of verbs, as can be seen in the following versions of the same sentence:

English: *Hurry down*

Luo: *Lor piny piyo* (lit. move-down ground quickly)

Nandi: *Choruge, chogu* (lit. descend, hurry)

Lunyore: *Yikha bwangu* (lit. descend quickly)

The English version with its Manner verb and Path particle ('satellite') shows that language's typical conflation of Motion with Manner. None of the Kenyan languages makes much use of satellites, although we have seen a few examples in Luo and also in Nandi with its suffixed Manner verbs.

The main aim of this study will be to investigate the possible influence of this difference in typical lexicalization patterns on the locomotion verb usage of Kenyan learners of English. The effect of the differing coverage of motion events in the three Kenyan languages will be an additional topic for attention. The next chapter describes the setting up of the research programme.

CHAPTER FIVE

THE RESEARCH DESIGN

This chapter will describe the experimental framework of the research, which, as already indicated, was carried out mainly in Kenya. The first section restates the aims of the research and presents four testable hypotheses derived from the research questions posed in the Introduction. The second section considers the range of lexical data collection techniques available to the researcher. The third section then looks at the actual research instruments which were used to test the four hypotheses presented in the first section. The fourth section deals with the piloting of these instruments and describes the methods of administration, as well as giving details of the groups of subjects who took part in the fieldwork. The final section discusses the statistical techniques used to analyse the data.

5.1 Defining the research hypotheses

The overall aim of the research is to investigate the interlanguage mental lexicon of ESL learners in a multilingual setting in order to clarify the role of the first language in lexical organization and use (both productive and receptive). Earlier chapters have indicated that the research is based on data which samples the broadly defined semantic field of human locomotion (described in Chapter Three) and encompasses native speakers of three African languages (discussed in Chapter Four).

The investigation of the semantics of locomotion in Chapter Three revealed the importance of spatial relations for this domain and the key role of conventional imagery in the Source-Path-Goal schema. This cognitive schema is realized linguistically in specific lexicalization patterns for which Talmy has proposed a typology (section 3.2), some languages preferring Motion conflated with Path and others Motion conflated with Manner/Cause (as in English), with a third pattern of Motion conflated with Figure being found in a small number of languages. The first of our research questions (see Introduction, section 0.3) relates to these patterns:

(i) Does the learner's L1 influence his choice of particular lexicalization patterns for locomotion in his L2 production?

The second question also concerns lexical production, but focuses on individual items:

(ii) Does the learner's L1 affect the amount of use he makes of particular L2 lexical items in the domain of locomotion?

The fifth question, which relates to the first two, should also be considered here:

(v) Is there a difference in the extent of L1 influence between learners at different proficiency levels?

We now need to formulate these questions as testable hypotheses, which will be given in null and alternative forms. It is clear that the fifth question does not require any new data, so that it will be convenient to incorporate this question in sub-hypotheses of those to be derived from the first two questions.

The first question yields the following sub-hypotheses:

H_0 1a L2 learners with different L1s show no significant preference for particular motion verb types in their L2 lexical production.

H_1 1a L2 learners show a preference for L2 motion verb types in accordance with their characteristic L1 lexicalization pattern.

H_0 1b L2 learners at different proficiency levels show no significant preference for particular motion verb types in their lexical production.

H_1 1b L2 learners at higher levels of proficiency show more preference for motion verb types that fit the characteristic L2 lexicalization pattern.

Each part of the hypothesis will be given an operational definition. 'L2 learners' here—and in the second hypothesis—refers to Kenyan learners of English from three different L1 backgrounds and at two levels of proficiency; details of the samples are given in section 5.4.2. 'Lexical production' refers to a story-retelling task which will be fully described in sections 5.3.1 and 5.4.1.1. 'Particular motion verb types' refers to Path and Manner verb types. 'Learners at different levels' is operationalized in this and the second hypothesis as learners at two levels which can be described as intermediate and advanced.

'Significant preference' here, as for all the hypotheses, means a standard 95% significance level ($p<0.05$).

The second question can be reformulated as these null and alternative hypotheses:

H_0 2a L2 learners with different L1s show no significant differences in the amount of use they make of individual locomotion verbs.

H_1 2a L2 learners show preferences for individual L2 locomotion verbs which can be related to 'equivalent' L1 items.

H_0 2b L2 learners at different levels of proficiency show no significant differences in the amount of use they make of individual locomotion verbs.

H_1 2b L2 learners at higher levels of proficiency show greater approximation to L2 norms in the amount of use they make of individual locomotion lexical verbs.

In this hypothesis 'use of individual locomotion verbs' is operationalized as performance on a sentence-completion task involving locomotion verbs (described in 5.3.2 and 5.4.1.2).

The two remaining questions relate to reception rather than production. In testing the hypotheses derived from them only the groups of advanced subjects were used. The reason for excluding the lower level groups was the relative sophistication of the tasks; it was thought that subjects in these groups might have some difficulty in understanding the requirements of each task (see section 5.4.2 below). Elaborate explanation, which was not needed for the advanced subjects, might have prejudiced the results.

The two questions are:

(iii) Does the learner's L1 influence his judgement of the acceptability of L2 sentences containing individual locomotion verbs?

(iv) Does the learner's L1 affect the way he sees the relationships between individual L2 locomotion verbs?

From question (iii) we obtain the hypothesis:

H_0 3 There is no significant difference in the way L2 learners with different L1s judge the semantic acceptability of L2 locomotion verbs in context.

H_1 3 L2 learners judge the semantic acceptability of L2 locomotion verbs in context according to their L1 norms.

'Judge the acceptability' here refers to a sentence-judging task involving a range of locomotion verbs; this will be described in sections 5.3.3 and 5.4.1.3.

Question (iv) yields the hypothesis:

H_0 4 L2 learners with different L1s sort L2 locomotion verbs in similar ways.

H_1 4 L2 learners sort L2 locomotion verbs in accordance with L1 semantic constraints.

This was more of an exploratory hypothesis and no significance level is attached to it. A card-sorting task — described in sections 5.3.4 and 5.4.1.4 — was used for investigating the hypothesis, with a set of 20 locomotion verbs.

5.2 Data collection techniques

Both lexical production and lexical reception data are required for the testing of the four hypotheses. In this section we will consider the range of data collection techniques that have been used in previous lexical research in second language acquisition, before describing in 5.3 the actual instruments used in this research project. The main types are listed in Table 5.1, with some of their attendant advantages and disadvantages. A number of the examples referred to were described in Chapter One (sections 1.3 and 1.4).

The tasks may be grouped according to type. The first two involve translation and are probably of limited usefulness. The second group—word association tests—have been widely used (e.g. in the Birkbeck Vocabulary Project mentioned in 1.3.2 above). The next three tasks (6, 7 and 8) also yield various kinds of potentially useful production data. Finally, the last two tasks are introspective in nature; they could be of value in investigating learners' lexico-semantic intuitions

A frequent criticism is made of experimental techniques which involve, as do many of the tasks listed, decontextualized lexical items:

> The use of discrete vocabulary items may tend to obscure or even misrepresent the nature of the map drawn between words by speakers of a language. (Carter 1987: 161)

(continued on page 134)

Table 5.1: Lexical data collection techniques in SLA research (Source: author)

TASK	INPUT	OUTPUT	ADVANTAGES	DISADVANTAGES	EXAMPLES
1. Translate L1 → L2	L1 words / sentences	L2 words	simple to conduct	not necessarily indication of spontaneous usage	(see Kellerman 1978)
2. Translate L2 → L1	L2 words / sentences	L1 words	as above	as above	
3. Basic / multiple association	L2 word	L2 word(s)	as above	no theory as yet for SLA associative behaviour; abnormality of test situation	Meara 1978, 1982 Kruse *et al.* 1987
4. Multiple association	letter of alphabet	L2 words	good indication of patterns of productive lexical knowledge	cannot reveal depth or even size of productive lexicon	Palmberg 1987
5. Restricted association	L2 word	L2 words in restricted categories	facilitates inter-lingual comparisons; relates words and meanings	only suitable for advanced subjects? also as 3 above	Riegel 1968 Ramsey 1981
6. Discourse completion (cloze)	L2 discourse with gaps	L2 items	enables precise comparison of usage	great care needed in design of discourse	Levenston & Blum 1978; Blum & Levenston 1978
7. Pictorial cueing	set of pictures	L2 words / discourse	avoids possible distortion by verbal input	problems of pictorial interpretation (ambiguity, culture etc.)	Linnarud 1986
8. Structured interview	L2 questions	L2 answers	experimenter has greater control over L2 output	needs to be highly structured to provide specific data; artificial situation	Selinker 1969
9. Sorting (direct grouping)	L2 words (on cards)	sorted cards	provides indirect measure of perceived semantic similarity	only suitable for fairly small sets of items	(Miller 1969) Kellerman 1978
10. Similarity rating	L2 word pairs / L1-L2 pairs etc.	rating scales	direct measure of semantic similarity	does not necessarily reflect productive usage	Strick 1980; Ijaz 1986 Kellerman 1978, 1979

The value of word association tests, in particular, has been questioned by Miller and Johnson-Laird on the grounds that

> the stimulus-response bonds between words that seem to be demonstrated in word association tests are not the psychological atoms out of which speech is built. Rather they are the consequence of making people use their linguistic competence in an unusual, not to say aberrant, test situation. (Miller and Johnson-Laird 1976: 250)[1]

In choosing appropriate techniques, the factors described by Tarone (1987)—in relation to methodologies for studying variability in SLA—need to be kept in mind, as they may all affect the results obtained.

1. The varying **amount of language elicited**, ranging in the tasks listed from single words to lengthy pieces of discourse. Isolated lexical output may well differ in kind from contextualized lexical output.

2. The **nature of the mental operation** which the learner is called upon to perform. For example, a task that explicitly requires translation may involve a different kind of lexical access from one in which associations are asked for. Also in relation to this factor, the precise instructions given (or the subject's understanding of them) may influence the result in ways that were not intended.

3. The **subject's perception of the purpose** of the task. If he thinks it is a curriculum-related test of his proficiency, this may raise affective barriers and possibly distort the result.

4. The **physical setting** in which the task is conducted. A familiar room in which subjects feel comfortable may give more reliable results than one which is not.

5. The **time allowed** for the subject to perform the task. Giving more time increases the chances of self-monitoring and so could give different results from a more restricted time allowance.

The choice of technique will depend partly on considerations such as these and also on the kind of subjects taking part. It is also necessary to bear in mind the general environment in which the fieldwork will be carried out; in the case of the present research, this would make the use of sophisticated technology somewhat impractical.

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[1] A recent SLA investigation (Kruse *et al.* 1987) has also cast doubt on the validity of word association tests *as indicators of language proficiency* (based on degree of stereotypy to native speaker responses), although it has left open the possibility that they may yield some results in the exploration of lexical interlanguage, provided this takes place "in a suitably elaborated theoretical framework" (Kruse *et al.* 1987: 153).

5.3 Research methodology

Research hypotheses need to be tested with instruments that are reliable and valid as well as practical for the setting in which they will be used. Reliability and validity could be assured by choosing a previously used and validated test but it may be difficult to find one that matches the exact requirements. Certain models may be found helpful, but considerable experimentation and piloting will be needed in order to maximize reliability and validity. Piloting should also reveal any practical difficulties associated with the instrument for the particular setting in which it is used.

In the previous section the type of instrument employed for the testing of each hypothesis has already been indicated. The four instruments are thus used in four separate but related studies:

(a) a story-retelling task

(b) a sentence-completion task

(c) a sentence-judging task

(d) a card-sorting task

The first two tasks were given to subjects at two levels of proficiency; the other two, for the reason given above, were used only with the higher level groups. The tasks will be described individually in sub-sections 5.3.1 to 5.3.4.

5.3.1 Lexical production: the story-retelling task

In the oral story retelling task the Kenyan subjects first heard a version of a story in their L1, while they followed a set of pictorial cues. They then used these cues to help them retell the story in English immediately afterwards. Each subject's version was tape-recorded. This procedure was repeated — with no advance notice being given to the subjects — after an interval of a week to ten days, but this time the Kenyan subjects heard the English version of the story, as did the English native speakers for their single retelling (see Appendix A for text, pictures and instructions).

Pictorial cueing techniques, which formed part of the methodology here, have frequently been employed in psychological studies, for example in naming experiments with aphasics (Aitchison 1987: 22). It is also a familiar tool in the language classroom (e.g. Wright 1976) and is employed in tests such as the Bilingual Syntax Measure (of morpheme studies fame) and the Upshur Oral Communication Test, which make use of cartoons and other simple drawings to

elicit language (Oller 1979). A group of linguists used a film without dialogue — the 'pear film' — to study the narratives produced by a speakers of a variety of languages (Chafe 1980). Pictorial cueing does not appear to have been widely used in interlanguage research. Researchers at Heidelberg in the European Science Foundation Project on adult immigrant SLA used a montage of excerpts from a Charlie Chaplin film *Modern Times* (Klein and Perdue 1992). Graham and Belnap (1986) used a pictorial technique similar to that of Labov (1973) to study the acquisition of lexical boundaries in English by Spanish learners.

An important consideration is the possible role of cultural factors in the interpretation of pictures and the production of narrative. Although it is fairly well established that pictorial object recognition is a human universal little affected by cultural variations, there is less certainty about the recognition of depth in pictures (Jahoda 1981). However, the pictures in this task did not stand alone but served rather as a kind of *aide-mémoire.* As for narrative, it is certainly instructive to find in the 'pear stories' volume cited above (Chafe 1980) instances of cultural differences in storytelling strategies not only from Mayan speakers in Guatemala but also from Greek speakers in Athens. Nevertheless, all the subjects in the present research had been receiving an English medium type of education in which Western cultural norms regarding such matters as test-taking and classroom storytelling are undoubtedly dominant.

The nearest approach in previous studies to the method used here is that of Linnarud (1986); however, she used pictorial cues as sole input, which her subjects had to interpret themselves as the basis for a written composition. My objective, by contrast, was to obtain oral narratives centred on the semantic domain of locomotion. The story format was used to provide a more 'naturalistic' framework than, say, isolated sentences; it also facilitates comprehension and reduces memory demands. The accompanying visual support also helped to reduce memory demands as well as the possibilities of re-interpretation; this could be seen as a kind of dual-coding approach (see the discussion of Paivio's work in 1.1.2 above).

It has also been assumed that comprehension is facilitated by the use of the L1 for the first hearing of the story (a factor which is particularly important for the lower level subjects). The second retelling after English input makes it

possible to observe the degree of permanence of L1 influence in the face of a TL model.

5.3.2 Lexical production: the sentence-completion task

The task in the second study was designed to produce data on individual lexical items; it is therefore a more focused exercise than the story-retelling. Subjects are given sentences from each of which a word is missing; they have to write in what they think are the most suitable items to fill the gaps.

Sentence completion was the technique adopted by Levenston and Blum-Kulka in their research on interlanguage lexis (cf. Levenston and Blum 1978), although they prefer the term 'discourse completion' because they are "not concerned with the grammatical or orthographic properties of the sentence." Greenbaum and Quirk (1970) in their first language research call this elicitation procedure a composition test. It is of course a familiar tool in language teaching and testing and one that all the participating subjects would have had ample experience of (unlike the other tasks). Levenston and Blum stress the ease of administration and analysis of this procedure and the degree of contextual control that it affords.

The methodology of Levenston and Blum-Kulka has largely been followed in this study. However, one important difference should be noted. They were concerned with the use of particular lexical items which related to their hypotheses, and they therefore had to restrict the context in order to achieve this. But, as they admit, if one is interested in semantic fields, such strict control of the grammatical environment is not necessary. Great care is needed all the same in the construction of sentences.

5.3.3 Lexical reception: the sentence-judging task

In this and the fourth study, an attempt was being made to tap learners' lexico-semantic intuitions. The aim of the sentence-judging task was to test the hypothesis that learners are influenced in their judgement of L2 semantic acceptability by their L1 norms. Subjects were presented with a set of sentences — which they saw briefly one at a time — that were syntactically and morphologically well-formed, but of which some might be considered semantically incongruous by native speakers or by learners with particular L1s or by both. The subjects were asked to decide immediately whether the sentence was a 'good' one or not.

Acceptability judgements have been used extensively by linguists investigating grammatical usage (see Greenbaum 1977) and have also come to be used in SLA research. Although this task did not involve grammaticality as such, it is not possible to draw a clear line between grammatical and semantic acceptability. The task was deliberately designed to elicit immediate reactions to sentences, before the subject had time to change his mind, to call upon the grammatical Monitor or direct focal attention on the form. It is assumed that L1 influence is more likely to be evident at the earliest stage of reception. There is, of course, a danger that, having to give a yes/no judgement under pressure, subjects will tend to give random judgements and so the experiment will not come up with significant results.

The test consisted of four kinds of sentence based on the researcher's expectations:

- semantically acceptable to everybody
- semantically acceptable to native speakers but not to learners with particular L1s
- semantically unacceptable to native speakers, but acceptable to learners with particular L1s
- semantically unacceptable to everybody

Most sentences will not of course be clear-cut cases; they will fit more or less exactly into one of the four categories. Ideally the test would have roughly equal numbers in each category; this would make for a more balanced analysis.

5.3.4 Lexical reception: the card-sorting task

This study uses the card-sorting technique developed by Miller (1969, 1972) for investigating the L1 mental lexicon. The typical procedure is for subjects to be given a deck of cards with a word and a sense-specifying definition on each card. The subject is then asked to sort the cards into piles on the basis of the similarity of meaning of the words. He is allowed to make any number of piles consisting of any number of cards. The responses of a group of subjects are then analysed statistically to give a measure of the perceived semantic similarities between the words.

The method was also employed in a more extensive set of studies by Fillenbaum and Rapoport (1977) and has been used before in SLA research by Kellerman (1978), but only with native speakers, the object being to gain insight into transferability constraints. Kellerman found that card sorting was

an effective means of tapping native speaker intuitions about semantic space. It does not appear to have been used with L2 learners.

As Miller noted, the sorting task

> is mildly interesting. It has the nondemanding character of a problem for which there are many correct solutions... Solving it is as much a matter of esthetic judgement as of conceptual knowledge. (Miller 1969: 170)

Similarly, Kellerman (1978: 75) points out that for subjects it may take on "something of the character of a game." It seemed worth trying with the higher level subjects as a way of exploring, rather than testing, the hypothesis that learners sort L2 lexical items in accordance with L1-based semantic relationships.

5.4 Research organization

Although the basic design of the four tasks had been established before the researcher arrived in Kenya for the fieldwork, the actual materials had still to be finalised and tested in conditions resembling those under which the tasks would ultimately be conducted. The process of piloting which led to the final versions of the tasks is described in sub-section 5.4.1; the subjects who took part in the fieldwork are then discussed in sub-section 5.4.2.

5.4.1 Piloting the tasks

The piloting was carried out in two stages. The first was done in Nairobi, mainly at Kenyatta University and the local headquarters of the British Council. Twenty six subjects took part altogether; there were 7 Luo, 4 Nandi, 8 Olunyore and 7 native speakers. The Kenyan language speakers were all undergraduate students from various faculties at Kenyatta University. The native speakers were adult British citizens resident in Nairobi. As a result of this initial piloting and the lexical analysis that I was concurrently making,[2] the original drafts of the materials underwent considerable modification, which is summarized below.

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[2] In making a contrastive lexical analysis of the three Kenyan languages for the domain of locomotion I was assisted by three lecturers at Kenyatta University who were native speakers of these languages. I was also able to get the help later on of other native speaker informants for the three languages. The results of this analysis, which is clearly provisional, are given in the relevant sub-sections of Chapter 4.

The next stage was to try out the revised materials with similar subjects to the ones who would take part in the main study. This was done in western Kenya. Seventeen students at Eregi Teachers College participated in this piloting (6 Luo, 6 Nandi and 5 Olunyore speakers), together with six pupils at Bunyore Girls High School (1 Nandi and 5 Olunyore speakers), representing the two proficiency levels at which the research would be carried out. All four tasks were tested, though the intermediate level subjects only did the first two, as explained above (5.1). It was thus possible to fine-tune the materials and finalise the task administration procedures; these are described below.

5.4.1.1 The story retelling task

The provisional narrative for this task was changed substantially in the light of the contrastive lexical analysis and of the pilot studies. The final version (see Appendix A) incorporates a wide variety of locomotion events involving both path and manner components within an East African cultural setting. The Kenyan language versions were revised several times by teachers who were native speakers of the languages concerned. The versions were further checked for fluency and conformity with the English original by asking informants who had not seen the original to review the text and re-translate it into English. Although the process of revision could have continued almost indefinitely, each of the versions finally arrived at can be said to represent a reasonably natural and idiomatic rendering of the story in that language. They also went some way towards achieving that *tertium comparationis* of "substantial equivalence" which is vital in contrastive work (Krzeszowski 1984: 308; cf. James 1980: 90).

Throughout all its revisions, the story retained its basic character as the description of a boy's journey to school. At one stage, an introduction to the story was included as a way of setting the scene, but this was dropped as unnecessary and potentially confusing, since it was not meant to be included in the retelling. In the final version the story consists of 30 motion 'events' for which there are 24 picture 'frames'; six of the frames therefore have two events associated with them, e.g. reaching a signboard and jumping the adjoining ditch (frame 4); slipping in the mud and falling on a rock (frame 17). The drawings, executed by a local art teacher in order to eliminate cultural bias, were intended to be as clear and explicit as possible, avoiding unnecessary or distracting detail (see Appendix A).

Each Kenyan language version of the story, together with instructions in that language, was recorded by a native speaker. The recordings included a 90

second pause for subjects to study the pictures before listening to the story for the first time, as piloting had revealed that some subjects were confused by having to follow the story without having had the chance to examine the pictures beforehand. The researcher used his own voice for recording the English version heard by all subjects.

All subjects—Kenyans as well as native speakers—retold the story either to the researcher or to his assistant (herself a native speaker of one of the Kenyan languages). Providing a live addressee helped to contribute to the naturalness of the task; however, subjects were fully aware that they were being recorded. It is possible that the unfamiliar listeners and the presence of the electronic equipment caused some initial awkwardness for some of the subjects. A few did begin with considerable hesitation, but they were allowed to restart if they wished. Most subjects nevertheless took to the task quite readily and it seems unlikely that these affective variables caused any serious distortion of the data.

Possibly because of the length of the narrative and the similarity of some of the pictures, a number of subjects had difficulty in retelling the story in the correct sequence and/or reinterpreted the pictures rather than use what they had originally heard. An example of the latter occurred with picture 14, which shows the boy, Juma, scratching his head while he stands at a junction not sure of his way. This was, in a few cases, no doubt influenced by his later accident, described as Juma holding his injured head! This kind of reinterpretation, together with omissions and the grouping together of incidents in the narrative in summarized form, makes complete frame-by-frame comparison between subjects impossible. However, the frequency of use of motion verb types or the overall use of individual verbs by subjects should not be affected by these problems.

5.4.1.2 The sentence completion task

Preliminary contrastive analysis of the lexicon of locomotion in the three languages suggested possible preferences for particular English lexical items. These initial predictions were not always borne out by piloting and nearly every original sentence was rewritten more than once, while some had to be dropped or replaced.

In the final version of this task, twenty sentences were given. In most cases the word to be inserted had to be a verb from the semantic domain of locomotion. However, four non-locomotion items were included to reduce the

concentration on a single domain; these items (nos. 2, 9, 14 and 18) were not used in the data analysis. The sixteen motion verb sentences represented a variety of path types. There were 4 end-point types, 3 intermediate-point types, 6 route types and 3 path-neutral types. The text of this task is given in Appendix B together with the instructions as printed on the sheet.[3]

Compared to the story-retelling task, greater demands on L2 comprehension were being made in this task: there was no visual support and each sentence had to be considered in isolation. Moreover, as Levenston and Blum (1978) point out, "no matter how precisely you word the instructions or orally brief the subjects, there will always be some who fail to do as requested." For example, a number of subjects used more than one word in some cases, despite the clear instructions to the contrary. It was also clear from some responses that their authors had either not read the sentence carefully or not understood it.

5.4.1.3 The sentence judging task

The preliminary contrastive analysis of the Kenyan languages did provide a basis for assigning sentences to particular categories. 40 sentences were used in the first pilot study; in the course of two more pilot studies the number was reduced to 30 and some sentences were rewritten to varying degrees. It was thought that there were slightly more sentences in the second and third categories (semantically acceptable either to native speakers or to particular language groups) than in the other two. But as the analysis in Chapter Seven will show, predictions based on the pilot studies were not always supported in the full-scale study.

The sentences for this task were assembled in the form of an A4 size booklet, with each sentence occupying single page. They were written in red letters with an average height of 2 cm, which enabled them to be easily legible from a distance of five metres or more. This was to facilitate the administration of the procedure to groups of 10 to 12 subjects at a time, with each sentence being exposed for approximately six seconds. Subjects indicated with either a tick or a cross on a piece of paper whether they found the sentence acceptable or not. Appendix C gives the sentences and the instructions issued to the subjects.

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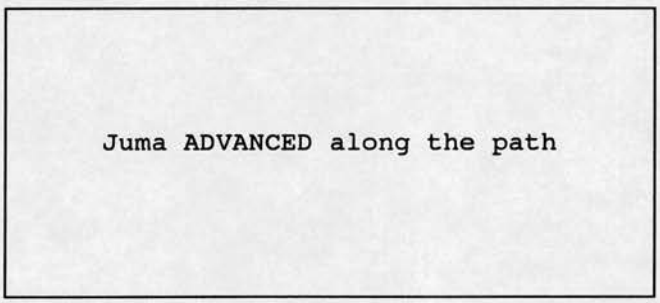
[3] In sentence 6 a suitable nearby town was substituted for Kisumu when it was used with native speakers.

5.4.1.4 The card sorting task

The main criteria for inclusion in the list of items were the likelihood of being part of the English lexicon of the average English primary teacher trainee (based on the previous experience of the researcher and advice from Kenyan teacher trainers) and the need for representation of a variety of both Manner and Path locomotion verbs. The initial list of twenty common verbs of locomotion was revised, after piloting revealed that some were not so well known after all, to the one below, which contains 9 Path and 11 Manner verbs:

advanced	hurried	passed	tiptoed
came	jogged	ran	travelled
crept	limped	returned	walked
dashed	marched	staggered	wandered
escaped	moved	strolled	went

The original plan was to use the sentence frame **Juma [v-*ed*] to school** on each card, but this produces some awkward sounding sentences with some of the verbs. Instead, **Juma [v-*ed*] along the path** was used, as all the verbs can fit fairly easily into this frame. The sentences were typed out on slips of paper approximately 11 cm by 6 cm, with the verb in capitals, thus:



No further definitions of the words were given and the instructions, following those of Miller (1969), were simply to sort the cards into piles according to similarity of meaning, with no restriction on the number of piles or of cards in them. Again following Miller, no explanation was offered of what was meant by similarity of meaning.

5.4.2 The subjects

A total of 160 Kenyan subjects took part in the four main studies, with a minimum of 20 in each group; native speaker data was later obtained from 101 subjects in all. Because of the practical difficulties of getting groups of people together on several occasions, subjects did not necessarily participate in all four

tasks. As already explained, only the advanced groups did the third and fourth tasks. The subjects in the advanced groups were given the four tasks in a variety of sequences, which were randomly assigned to control for the effect of order (although all began with the first story retelling). Table 5.2 gives the schedule of subjects for all the tasks.

Table 5.2: Schedule of subjects for the four tasks

	TASK A	TASK B	TASK C	TASK D
Luo intermediate (DLS)	24	26	–	–
advanced (DLT)	22	26	25	32
Nandi intermed (NAS)	21	25	–	–
advanced (NAT)	23	30	28	35
Lunyore intermed (YRS)	27	29	–	–
advanced (YRT)	20	24	21	26
Native speakers (MT)	33	68	48	31

The intermediate level subjects came from first year classes in five different secondary schools in the west of Kenya. They had had eight years of primary education, at least five of which would have been officially English medium (see 4.1.3); their ages ranged from 13 to 20, with a median of 16. A wide age range such as this in a single class level is quite common in Kenyan schools, particularly those in the rural areas, where the starting age for schooling is variable and interruptions and repeating of classes occur frequently.[4] Male and female subjects were approximately equal in number. To reduce institutional bias slightly, subjects in each language category were drawn from two schools rather than just one. The schools providing Nandi speakers and those providing Lunyore speakers were all situated in areas where the surrounding community spoke the corresponding language. In the case of the Luo speakers, one of the two schools was located very close to the border of the Luo-speaking area; the other was somewhat further away, but the subjects were all boarders at the school, where they formed a substantial proportion of the population.

The advanced level subjects, with the exception of seven Lunyore speakers, were all second (i.e. final) year students at a single primary teacher training college, situated in an area where the local community spoke a Luyia dialect different from Lunyore. All the subjects, who were boarders at the college,

[4] Only the Nandi group had subjects aged 18 and over.

were therefore living outside their own speech community. It proved impossible to find sufficient numbers of Lunyore speakers at this college; use was therefore made of seven students at the same level in a similar institution some ten miles away (but just inside the Luyia-speaking area). Every one of these advanced level subjects had had at least six more years of education in English than the intermediate level subjects; their ages ranged from 19 to 38, with a median of 24.[5]

The two levels were chosen as the most practical ones in the Kenyan context for testing the third hypothesis, which required a significant difference in the length of learning period between the two levels. It would not have been easy to conduct this kind of research in most Kenyan primary schools, except in some urban areas where the multilingual environment would make it more difficult to disentangle L1 influence (cf. 4.2). The gap in English proficiency between first year secondary school pupils and final year primary school teacher trainees should be adequate for this investigation.

Native speaker data was obtained from pupils at three schools, one in England and two in Scotland; all the subjects were aged 11 or 12. They provided comparative data to check against the Kenyan groups rather than performing the function of a true 'control' group. The reason for using children of this age was because they were at approximately the same educational level as the intermediate level Kenyan subjects.

Additional data for Task C was also obtained from other groups in Kenya and Britain. Although this data is referred to for comparisons in Chapter Seven, it was not used for hypothesis testing.

5.5 Methods of data analysis

The four studies outlined above involve different kinds of data and make different assumptions about the nature of the data, so that a range of statistical procedures was required, including various types of ANOVA, chi-square tests, cluster analysis and multidimensional scaling. The reasons for using particular tests and the actual procedures followed are detailed in the following sub-sections.

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[5] Only seven subjects were aged over 30; all were from the Nandi group.

5.5.1 The story-retelling task

This task was used to test two sub-hypotheses —1a and 1b— relating to language differences and proficiency levels respectively. The task also involved two retellings, so that there are three factors to be considered, the last having a repeated measure:

- Subject's first language (3 levels)
- Subject's proficiency level (2 levels)
- Input story language (2 levels)

Figure 5.1 shows the cells in the design, with the number of subjects in each.

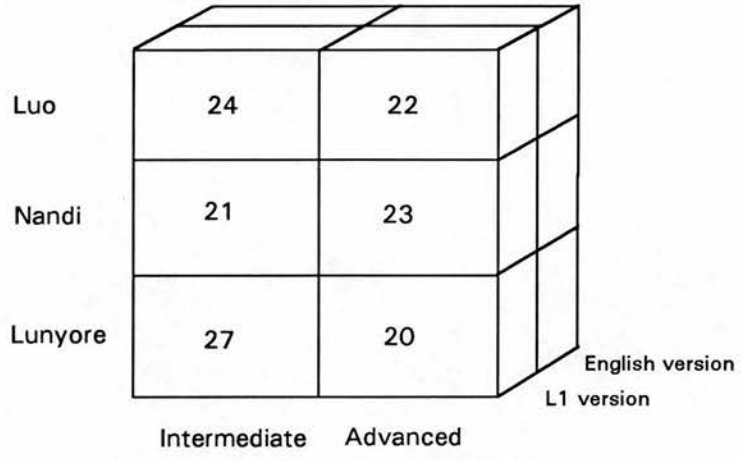

Figure 5.1 The design of Task A

The data, of which more will be said in a moment, is of the interval type and there are 20 or more observations in each cell. A parametric test is therefore possible and the appropriate procedure for this unbalanced design is a three-way Analysis of Variance, with fixed type effects and a repeated measure on the last factor. It is less easy to be sure if the other assumptions of the ANOVA method are satisfied, namely, that the populations from which the samples are derived are normally distributed, and that they are of approximately equal variance. However, the technique is known to be fairly robust in its tolerance of all but gross departures from normality and homogeneity of variance.

In 5.1 above, it was stated that, for the first hypothesis, 'particular motion verb types' would be tested by calculating the proportion of Manner verb types used in the lexicalization of locomotion. Thus it was necessary to tabulate the lexical usage of each subject frame-by-frame for each retelling. To facilitate this, once the verb phrases in each retelling had been transcribed from the recordings (see 6.1.1), the data was arranged, using the dBASE III Plus

program, in five 'fields' for each frame of the story, labelled Verb I, Verb II, Particle I, Verb III and Particle II. For the majority of frames only Verb II would need to be filled: this was the main verb of motion used by the subject. The associated preposition or particle was put in the Particle I field. Verb I was used for initial non-motion verbs which were sometimes used in a complex verb phrase with the motion verb, e.g. *decide, start, continue, tell.* However if *start* or *continue* were used alone to express motion they were placed in the Verb II field. The Verb III and Particle II fields were used to accommodate any additional motion verbs and associated preposition/particles that were linked with the main motion verb, e.g. GO in *he hurried and went away.* All verb forms were regularized to the base form to facilitate counting, since tense and person usage was not under review. Finally the motion verb type of Verb II was identified by letter — P for Path verb, M for Manner verb, X for other verbs (see 6.1.2 below) — in a separate field, again to facilitate counting.

The measure chosen was the proportion of Manner verbs used. Various other possibilities had been considered and some tried out. The formula adopted needs to be mathematically sound, show up significant differences between subjects and make sense in terms of the hypothesis. Ideally it should be simple and easy to conceptualize.

The formula could be either a ratio or a proportion. Table 5.3 shows some of the formulae considered.

Table 5.3 Some possible formulae for verb type measure

Ratios	Modified ratios	Proportions
P/M	P/M(T)	P/T
P/M+X	P/M(T)(T/30)	M/T
M/P+X	P/M(T/30)	X/T

The first measure to be considered was the simplest and most obvious: the P/M ratio. The Path verb tokens would be divided by the Manner verb tokens for each subject's retelling. This would show the extent of preference for either path or manner verbs. A score of 1 would indicate an equal number of Path and Manner verbs, less than 1 would indicate more Manner than Path verbs, while above 1.0 would show the converse. However, as with all ratios, it assumes that both figures in the formula are greater than zero; for if either was zero, the result itself would be an ambiguous zero. So this would rule out retellings that had either no Path or no Manner verbs. As it happened, there were no subjects who had not used any Manner verbs at all, but two of the native speakers had used no Path verbs.

Another problem with ratios is that they exaggerate quite small differences when the total numbers involved are low. Thus a subject who had 17 Path and only 1 Manner verb in one retelling would have a P/M ratio of 17.0 which is double that of a subject with the same number of Path verbs but just one more Manner verb. Using a proportion, say the P/T, which also allows for the presence of Other verbs, would give a more realistic picture: 0.77 for the first subject as against 0.81 for the second.

Adding the total of Other verbs to the denominator would also produce less extreme figures, but would still need a numerator that was greater than zero.

These reservations on ratios would apply to some extent to the modified ratios as well. The P/M(T) ratio, more accurately written as

$$\frac{P(P+M)}{MT}$$

has the effect of moderating the ratio although only when there are other verbs apart from Path and Manner. It can still distort the differences between subjects. Consider the following hypothetical cases:

	P	M	X	TOT	P/M(T)	P/T	M/T
(i)	10	5	5	20	1.5	0.5	0.25
(ii)	15	10	0	25	1.5	0.6	0.40

The P/M(T) ratio is identical, but it hides the very real difference in the P and M scores, which both the P/T and M/T proportions bring out.

The other two formulae for modified ratios represent an attempt to allow for the difference in absolute figures. The P/M(T) ratios for (iii) and (iv) would be the same, even though subject (iv) produced 40% more verbs:

	P	M	X	Total
(iii)	10	5	5	20
(iv)	14	7	7	28

The P/M(T)(T/30) ratios are (iii) 1.00 and (iv) 1.40, while the P/M(T/30) ratios are (iii) 1.33 and (iv) 1.87. However there is the same possibility of distorting subject differences.

Using proportions would seem therefore to be preferable, even though they are not without their problems. In the end it was decided to calculate both the P/T and M/T proportions as percentages. But the M/T proportion is in some

ways preferable, in that the assignment of verbs to the Manner category is less problematic than it is to the Path category.

The three-way model of ANOVA described above will not, however, accommodate the native speaker subjects, who were not divided into proficiency groups and naturally only heard the English version of the story. To enable comparisons to be made between the learners and native speakers, a one-way ANOVA is needed for each retelling.

5.5.2 The sentence-completion task

The data from this task consists of frequencies of occurrence of individual verbs for each of the sentences in the exercise. As mentioned above, only the 16 sentences involving motion verbs will be considered. Since the data consists of *independent* sets of *frequencies*, two of the main requirements for a chi-square test are satisfied. Unfortunately, with a fairly small sample size and the possibility of idiosyncratic usage of several different verbs, contingency tables with separate rows for every single verb used would inevitably have many cells with either zero or very low frequencies. In order to observe the generally accepted rule that no expected frequency should be less than 1 and that not more than 20% of the cells in a table should have expected frequencies of less than 5, it will be necessary to collapse several of the rows in each table. The collapsing should of course be done in such a way that it does not violate another requirement of the chi-square test, namely, that categories should form a logical classification. There is, however, no way of avoiding the loss of information which this entails.

Contrastive lexical analysis (see section 4.2) suggests that for particular sentences certain English verbs would be favoured by speakers of one or other of the three Kenyan languages. In other words, cross-linguistic effects are predicted on a number of items. While it should be remembered that a significant chi-square result does not necessarily indicate a causal relationship, such a result would at least mean that there is an association between two variables; in this case, first language and choice of verb. If significant results are achieved on a clear majority of the sentences on which they are predicted, then the null hypothesis can be rejected.

A separate chi-square calculation will be needed to test sub-hypothesis 2b as the procedure cannot handle more than two variables at a time (and of course cannot show interactions). The figures of all the intermediate level groups and

of all the advanced level groups will therefore have to be pooled, with a consequent loss of information.

The chi-square test is less powerful than a parametric test like ANOVA and the loss of information resulting from pooling columns or collapsing rows is a clear limitation. Nevertheless, it provides a useful way of analysing data like that from Task B.

5.5.3 The sentence-judging task

As explained in 5.2.2.3 above, the sentences used in this study fell into four potential categories of acceptability on the evidence of the contrastive lexical analysis carried out on them. Acceptability percentages for each sentence and for each language group will be calculated and a one-way Analysis of Variance used. For rejection of the null hypothesis, an ANOVA on all the sentences of Category I (semantically acceptable to everybody) or on Category IV (semantically unacceptable to everybody) should not be significant, whereas an ANOVA on Category II and on Category III should be significant at the chosen level. While post-hoc Scheffe tests would indicate — if the ANOVAs were significant — which of the languages were in contrast, it will be more meaningful to examine the percentages for each sentence individually to find out where the differences actually lie, using chi square tests for significance on the raw scores.

5.5.4 The card-sorting task

The final study is, as has already been indicated, more exploratory in character. It will not be possible to reject the null hypothesis (H_0 4) in the same way as in the other studies. The data might, however, provide qualitative grounds for rejecting it.

The individual sorting records of each subject will be used to construct a similarity matrix for each group, each cell of the matrix showing the number of subjects who had put that particular pair of items in one pile. It is possible to make interpretations directly from the matrix, but the techniques of cluster analysis enable this to be done in a more orderly way. A brief discussion of these techniques is therefore in order at this point.

The origins of this type of analysis can be found in the development of methods of numerical taxonomy in botany and zoology which started in the late

eighteenth century. Cluster analysis is itself the name for a cluster of techniques — mostly formulated by mathematical statisticians in the late 1960s and early 1970s as computers came to be more widely used — for grouping together entities of any sort (cf. Everitt 1974; Lorr 1983; Aldenderfer and Blashfield 1984; Kaufman and Rousseeuw 1990). The basic idea is that entities (which can be individuals or objects) in the same cluster are more like each other than they are like those in other clusters. The techniques of cluster analysis are therefore designed to maximize differences between clusters relative to variation within clusters. Similarity or dissimilarity measures can also be regarded as distances between entities[6]. There are two general categories of clustering algorithms, hierarchical and partitioning. Hierarchical procedures, which involve the construction of tree-like structures, can be either divisive or agglomerative, the last being the most commonly used type of cluster analysis and the one employed here.

In agglomerative methods the entities with the shortest distance between them are linked first, then those with the next shortest distance, and so on until all the entities are joined in one all-embracing group. Thus in single linkage—also known as the nearest-neighbour method—groups initially consisting of single individuals are fused according to the distance between their nearest members, the groups with the smallest distance being fused first. Each successive fusion decreases by one the number of groups. The furthest-neighbour or complete linkage method is exactly the opposite in that the distance between groups is now defined as that between their most remote pair of individuals. Average linkage is a compromise between these two methods. Other methods exist, with varying degrees of mathematical complexity, such as Ward's method and the centroid method. The choice of method depends very much on what the investigator is using cluster analysis for, but even so is by no means clear-cut.

It should be apparent that cluster analysis is essentially exploratory and descriptive in nature. Since the investigator is free to choose the type of similarity/dissimilarity measure, the clustering algorithm and the cut-off point for determining the number of significant clusters (though 'rules' do exist for this), cluster analysis displays a great deal of flexibility. It also renders its interpretation somewhat problematic, since hierarchical clustering will by

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[6] For this purpose it is necessary to convert the raw data in the similarity matrix into proportions of dissimilarity.

definition produce clusters even when they are not really present in the data. However, the data in this case is derived from a clustering task. Finally, the need for some kind of validation technique is stressed by several authorities (e.g. Aldenderfer and Blashfield 1984). The only one which it was possible to use here was replication, i.e. splitting each sample into two and performing cluster analysis on both to check for internal consistency.

A more graphic way of presenting cluster analysis data is by means of multidimensional scaling (cf. Everitt 1978; Hair *et al.* 1987). This is a set of techniques related to cluster analysis in that they operate on similarity measures, but the results are obtained by a totally different algorithm. Multidimensional scaling (MDS) programs attempt to find a set of points in a reduced number of dimensions such that the distances in this lower dimensional space are monotonically related to the similarities in the matrix. The monotonicity property (by which a value **either** never decreases **or** never increases) cannot in general be completely satisfied and a measure called 'stress' is used to assess the extent to which a configuration falls short of this requirement. Essentially an MDS program begins from an arbitrary initial configuration and proceeds in a stepwise manner making successive adjustments to the co-ordinates in order to decrease the stress.

Both cluster analysis and multidimensional scaling will be used in the analysis of the data from Task D.

5.6 Summary

In this chapter the experimental framework of the four studies comprising the present work has been described and justified. Two of the studies consider productive lexical usage and two look at receptive usage, all within the same semantic domain of locomotion. The methodologies range from story retelling to card sorting. Statistical analysis of the data will be carried out using a variety of techniques: ANOVA, chi-square tests, cluster analysis and multidimensional scaling.

The next two chapters present the analysis of the data under the two headings of productive and receptive usage respectively.

Part III

Research Findings

CHAPTER SIX

ANALYSING THE LEXICAL PRODUCTION DATA

The lexical production tasks described in the previous chapter generated large amounts of data for processing, especially the story retelling. In this chapter, the preliminary work of transforming each set of raw data into usable material for the research analysis will be briefly described at the beginning of each of the two main sections, 6.1 and 6.2, dealing with the story retelling and the sentence completion tasks respectively. Attention will then be turned in each case to the analysis itself, carried out on the lines indicated in the previous chapter (section 5.5). Certain additional tests were carried out where it was thought they might yield further insights within the framework of the original hypotheses, and these are also described.

6.1 The oral story-retelling task (Task A)

The main purpose of this task was to provide data for testing Hypotheses 1a and 1b, relating to motion verb lexicalization patterns. In order to carry out statistical analysis using Analysis of Variance, the recordings made in Kenya and in Britain had first to be transcribed and edited.

6.1.1 Transcribing the recordings

It was not considered necessary to make full transcriptions of all the recordings, since the study was only concerned with the use of verbs (and their associated particles). A number of retellings were, however, fully transcribed and a selection of them is given in Appendix D to illustrate the different ways in which subjects tackled the task.

Apart from the usual transcription problems with oral texts a further and potentially more serious difficulty was the occasional problematic interpretation of the speaker's words, which could affect the categorization of the lexical items. Nevertheless, in nearly all cases this could be clarified from the context.

As explained in the previous chapter (section 5.5.1), the transcribed verbs were entered in a database program (dBASE III Plus) to make the analysis easier. For the analysis to be effective, however, the verbs needed to be classified according to semantic type.

6.1.2 Classifying the verbs

A total of 164 verb types was used in referring to the motion events in the narrative. Many of these had only a single token, i.e. they were just used once by a single subject. The use of individual verbs will be discussed in section 6.1.4. Here we shall be concerned with the preparation for testing Hypotheses 1a and 1b.

The first step in the analysis was to assign all the verbs used to refer to locomotion to their appropriate semantic categories. After experimenting with a fivefold breakdown,[1] it was eventually decided that three categories would be adequate:

- The first consisted of general motion verbs such as *move,* together with path-specifying motion verbs like *come, cross, enter, follow, leave* and *reach.* It should be noted that the most frequently used verb of motion—*go*—-can have either a general motion or a path—usually deictic—sense.)
- The second category was made up of manner-specifying motion verbs, such as *climb, crawl, jump, run, squeeze* and *walk.*
- The third category was a broad range of other verbs used to refer to a motion event. These could be subdivided into various sub-categories, such as causal and aspectual, which need not detain us here, since they are not relevant to the hypothesis being tested. Although this was quite a large category in terms of verb types, most were used only once or twice.

The overall distribution of these categories for each language group is shown in Figure 6.1. The figures can be compared with the distribution for each of the language texts which is given in Figure 6.2. Assuming that the three Kenyan languages are all of the path-conflating motion verb type, the distributions in Figure 6.1 are consistent with the interpretation that subjects maintained in their L2 usage the motion verb-type preference of their L1, though that is not the only possible interpretation. The rejection of the null hypothesis requires, however, a firmer statistical basis.

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[1] This is the classification shown in the verb data as given in Appendix E. Verbs coded A and P correspond to the new first category, M is the second category, T and X indicate the third.

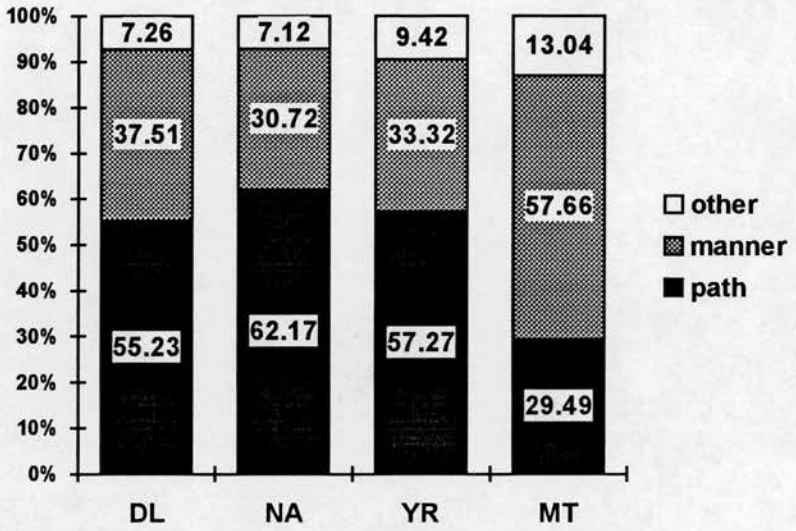

Figure 6.1: Distribution of verb semantic categories in story retelling (overall percentage occurrence)

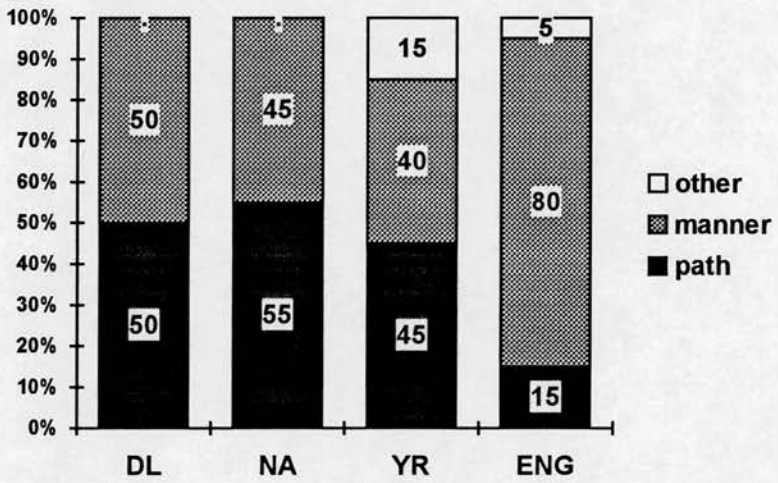

Figure 6.2 Distribution of semantic categories in language texts (percentage occurrence)

6.1.3 Assessing Path and Manner verb use

As explained in 5.5.1, a three-way ANOVA model was used, with fixed type effects and a repeated measure on the last factor. The first factor, First Language, has three levels, i.e. Luo, Nandi and Lunyore; the second factor, Education has two levels, i.e. intermediate (Secondary School) and advanced (Teachers College); and the third factor, Story Language has two levels, i.e. mother tongue version and English version.

This model cannot, as was also pointed out in 5.5.1, accommodate the native speaker subjects, who were not divided by Education and naturally only heard the English version. To enable comparisons to be made between learners and native speakers, a one-way ANOVA has to be used for each of the retellings (see Appendix F, Tables 1–4).

On this overall comparison between learners and native speakers highly significant F ratios were obtained for both the Manner (M/T) measure (for the first retelling: $F(6, 163)=21.52$, $p<0.001$; for the second: $F(6, 163)=14.55$, $p<0.001$) and the Path (P/T) measure (for the first retelling: $F(6, 163)=20.76$, $p<0.001$; for the second: $F(6, 163)=13.82$, $p<0.001$). Thus there is a clear difference between all the learner groups on the one hand and the native speakers on the other, which is confirmed by post hoc Scheffe tests (Appendix F, Tables 5–8).

It can confidently be stated that the Kenyan learner groups in this experiment made significantly less use of Manner verbs of motion and more of Path verbs than the native speakers; we can therefore reject the first null hypothesis.

Having demonstrated this, we can now turn to the differences between the learner groups and consider the probability that these reflect differences between the populations from which they were drawn.

We first consider the M/T measure, which represents the proportion of Manner verbs to the total number of motion verbs used by each subject on each retelling. The mean figures for all the Kenyan groups are displayed in Figure 6.3. The results of the three-way ANOVA that was carried out (see Appendix F, Table 9) show all three main effects to be significant: First Language ($F(2, 131)=4.24$, $p<0.05$), Education ($F(1, 131)=4.31$, $p<0.05$) and Story Language ($F(1, 131)=13.07$, $p<0.01$).

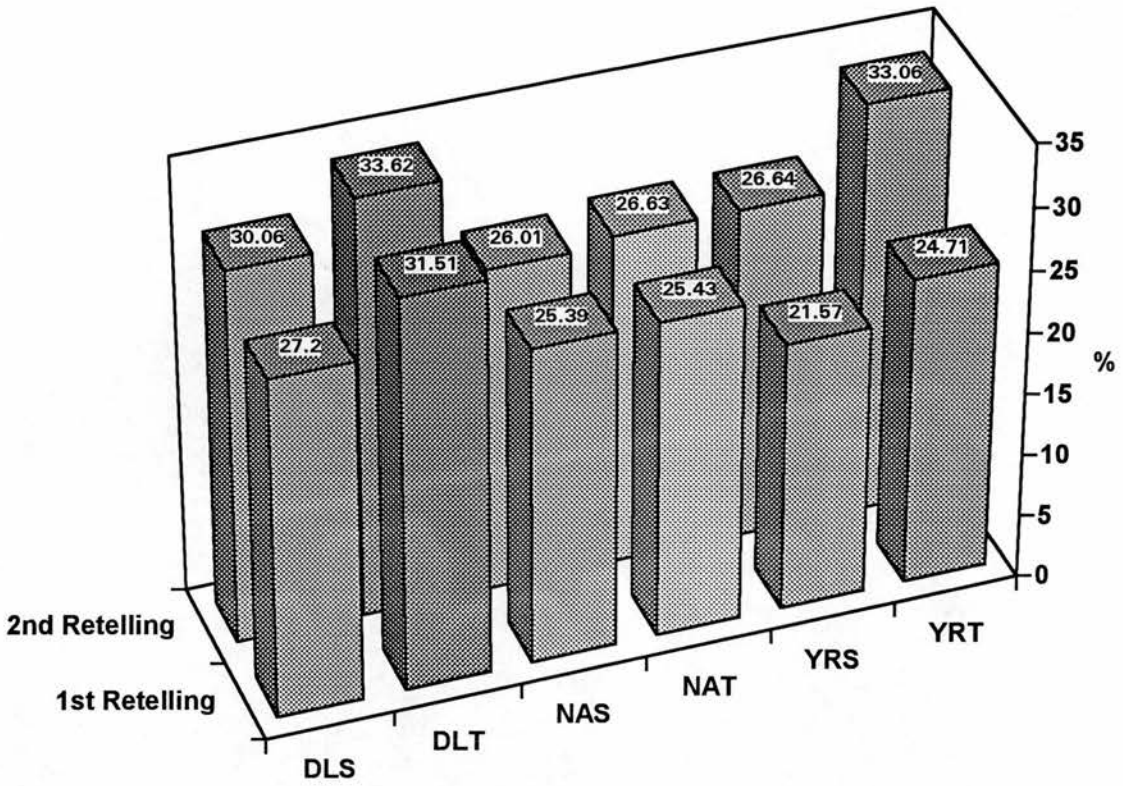

Figure 6.3: Manner verb mean percentages for Task A

There is also a significant interaction effect between First Language and Story Language on the M/T measure ($F(2, 131)=3.17$, $p<0.05$), which seems to be the result of the Lunyore speakers showing a much greater increase in Manner verb use on the second retelling than the Luo and Nandi speakers. However, a Scheffe test on the First Language means shows the Luo group as having a significantly higher Manner verb use than the Nandi group: it just fails to reach the level of significance in the contrast between the Luo and Lunyore speakers (Appendix F, Table 10).

The picture obtained from ANOVA on the P/T measure shows a very significant Education effect ($F(1, 131)=9.45$, $p<0.01$) as well as a Story Language effect ($F(1, 131)=5.17$, $p<0.05$), but no First Language effect at all (Appendix F, Table 11).

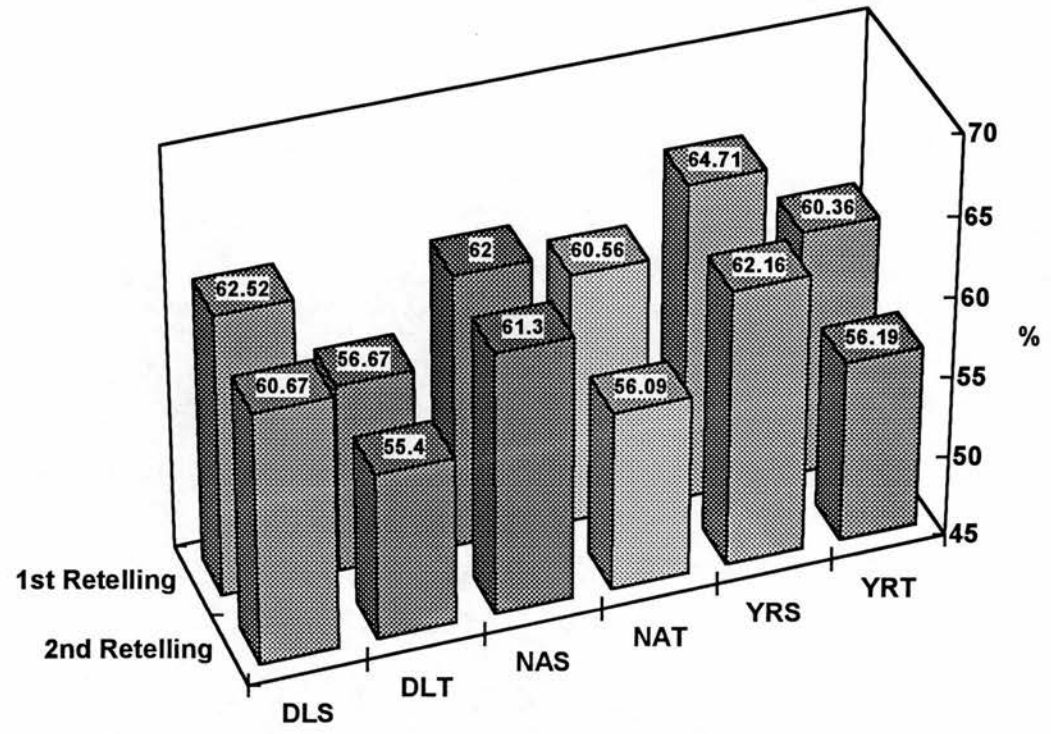

Figure 6.4: Path verb mean percentages for Task A

The conclusion to be drawn is not surprising in view of the typological similarity between the three Kenyan languages with respect to motion verbs. There also appears to be a significant Manner verb difference for the Luo group. There is no doubt about the importance of the other two main factors, Education and Story Language. The teacher trainees used significantly more Manner and fewer Path verbs than the secondary students, as did all subjects after listening to the English version of the story.

The overall picture is thus fairly clear. But as we saw in Chapter Three (section 3.2.3.1), motion events can be characterized in terms of Path types. We might therefore ask whether the pattern of results is similar across the Path types in the narrative.

6.1.3.1 Manner verb use by Path type

The frames in the story can be grouped according to the simplified set of five Path types described in 3.2.3.1 (Table 6.1).

Table 6.1: Path types in Task A narrative

Type I	**'FROM' (source-focused)**		
1.	Juma left Otieno's house after breakfast		
3.	Juma then strode off briskly		
17.	...he slipped off the raised path		
19.	...limped away from the unlucky spot		
20.	...John leaving his home		
22.	Juma set off for school with John		
Type II	**'TO'**	**(goal-focused)**	
4.	...he reached a signboard		
6.	...he reached the small market		
8.	...he wandered over		
10.	...to get back on his path		
12.	...he came to a shallow stream		
14.	...he came to a fork in the path		
17.	...fell on a rock		
21.	John invited him in to rest		
24.	...they raced to the school gate		
Type III	**'VIA'**	**(focus on intermediate reference object)**	
4.	...he jumped over the ditch		
7.	he strolled round the shop		
9.	...he squeezed past two fat women		
10.	...hurried round a corner		
11	...the village madman ran past him		
12.	...he waded across it		
23.	...they sneaked round the back of the headmaster's house		
Type IV	**'ALONG/ALENGTH'**	**(path-focused)**	
	(a)		(b)
5.	...took a narrow path into the bush	2.	Otieno walked up to the road with J (*along-to*)
11.	...he staggered back for a moment	13.	..scrambled up the slope (*alength*)
14.	...he followed the path to the left	15.	...ran back to take the other path (*alength*)
16.	...he trudged through a lot of mud	18.	...he crawled back on to the path (*along-to*)
Type V	**(path-neutral)**		
none			

Two frames (7 and 11.1) were excluded because of an inadequate amount of data. In addition, the two sub-types of Type IV were not distinguished. The same three-way ANOVA model was used as described before; the full tables are given in Appendix F (Tables 12–15).

For Path Type I (source-focused), there were significant effects in First Language ($F(2, 131)=5.49$, $p<0.05$) and Story Language ($F(1, 131)=3.93$, $p<0.05$). The greater use of Manner verbs by the Luo speakers was certainly evident here.

For Path Type II (goal-focused), the only significant effect was Story Language ($F(1, 131)=4.35$, $p<0.05$) but this was not because of an increase in the use of Manner verbs on the second retelling as in the overall results; on the

contrary, there was a decline. However, the actual number of Manner verbs was quite low on both retellings and the native speaker subjects also used relatively few Manner verbs, mirroring the low proportion in the English text (33.3%).

On Path Type III (focus on an intermediate reference object), there were significant effects for Education ($F(1, 131)=6.20$, $p<0.05$) and Story Language ($F(1, 131)=20.68$, $p<0.01$). Here the increase in Manner verb use on the second retelling was clearly apparent. There was very little difference between the three language groups—less than 1% between them.

Finally, with Path Type IV (focus on the path itself), there were no significant main effects. Instead there was an interaction between First Language and Story Language ($F(2, 131)=5.84$, $p<0.05$). Nandi speakers used fewer Manner verbs on the second retelling, Luo speakers about the same, but Lunyore speakers used more.

The overall pattern of results is thus not maintained across the Path Types.

6.1.4 Individual verb use

We have seen that there is no clear evidence of significant differences between the three Kenyan language groups as far as motion verb preference is concerned. Because of the abundant data available from this task it is worth considering the possibility of significant differences in individual verb use, which relates to the second hypothesis.

Altogether there were, as mentioned earlier, 164 separate verb types used by the Kenyan subjects, with many types used only once. Table 6.2 shows the most frequent verbs with their occurrences in each of the Kenyan groups at both retellings.

Table 6.2 Most frequent verbs used by subject groups in Task A

Verb	DS1	DS2	DT1	DT2	NS1	NS2	NT1	NT2	YS1	YS2	YT1	YT2	MT
climb	18	16	18	7	21	15	25	11	19	13	20	17	27
come	38	59	33	44	21	34	24	40	29	28	17	29	111
crawl	6	6	7	11	12	13	11	13	9	18	4	11	4
cross	5	4	8	7	7	10	19	11	14	12	12	13	2
escort	25	21	20	23	19	28	37	32	30	26	21	18	1
fall	23	18	22	19	20	22	22	17	26	29	13	14	14
follow	27	24	22	14	19	14	21	24	41	38	18	14	2
go	68	56	62	40	97	97	94	84	112	96	55	35	77
jump	21	20	23	21	15	20	22	19	21	27	22	15	32
leave	6	11	7	12	2	12	8	20	3	10	15	12	26
pass	42	41	27	19	61	38	31	23	39	30	15	16	4
reach	38	43	38	61	49	59	50	48	76	95	67	67	5
run	31	24	36	24	37	24	26	19	33	28	12	12	39
take	15	17	30	25	7	9	16	10	5	15	15	18	31
walk	54	54	46	56	15	25	21	25	39	50	18	37	111
ALLVBS	**499**	**502**	**506**	**495**	**505**	**604**	**519**	**501**	**595**	**629**	**417**	**428**	**693**

There are however just seven common verbs which account for 54.6% of the total number of verb tokens. These are: *come*, *go*, *follow*, *pass*, *reach*, *run* and *walk*. It was decided to analyse the usage of these with the three-way ANOVA model. The measure used for each verb was the proportion of this verb to the total verb usage for each subject/time. The results are summarized in Table 6.3; the full ANOVA tables are given in Appendix F, Tables 16–22.

Table 6.3: F ratios for seven selected verbs

	First Language (2, 131)	Education (1, 131)	Story Language (1, 131)
come	3.75*	0.04	13.92***
go	7.44**	5.72*	11.89***
follow	1.90	2.80	3.07
pass	1.78	13.17***	7.61**
reach	10.79**	0.04	6.69*
run	3.53*	2.05	8.19**
walk	10.66**	0.42	8.87**

* $p<0.01$ ** $p<0.001$ *** $p<0.0001$

There were no significant interaction effects on any of the verbs and for one verb—*follow*—no significant F ratios at all were obtained. But for all the others there was a significant—usually highly significant—Story Language effect. The use of *come, reach* and *walk* increased on the second retelling while the use of *go, pass* and *run* declined. (In the English text of the story *walk* and *follow* were used once each and *run* twice, but none of the other verbs.) An Education effect was evident for *go* and *pass* (the latter significant at $p<0.001$): the teacher trainees used these verbs much less than the secondary students. For *come, go, reach, run* and *walk* there was also a significant First Language effect, with the F ratios for *reach* and *walk* being particularly significant. Scheffe tests were carried out to determine the particular significant contrasts; the results are displayed in Appendix F, Table 23.

To summarize the interlingual differences: Luo and Nandi speakers were significantly different for both *go* and *walk*, the Nandis using *go* more than the Luos, a preference which was reversed for *walk*. Luo and Lunyore speakers differed significantly for *come*, *reach* and *run*: the Luos made more use of *come* and *run*, while there was a strong Lunyore preference for *reach* (on which there was also a significant difference between them and the Nandis).

This evidence of significant differences in the amount of use of individual locomotion lexical items by speakers of different L1s will be useful when we come to consider the second hypothesis, for which Task B was designed as the main test (see 6.2).

6.1.5 Additional verb and particle use

Data was also available on the use of other verbs and associated elements in each story frame: an initial non-motion verb and a secondary motion verb, as well prepositions or particles associated with the main or secondary motion verbs (see 5.5.1). The same three-way design of ANOVA was used on this data too. For the secondary motion verb no significant F ratios were obtained; because of this, and the fact that their actual frequency of use was very low, no analysis of the preposition/particle for the secondary motion verb was carried out.

The full ANOVA results for the proportions of initial verbs in each subject's output are given in Appendix F, Table 24. There was an extremely significant Story Language effect: $F(1, 131)=40.99$, $p<0.001$; in fact 23.2% of the within-subjects variance can be attributed to this effect, reflecting the fact that all subjects tended to use fewer initial verbs on the second retelling. There was also a significant First Language effect ($F(2, 131)=4.98$, $p<0.05$); the results of a Scheffe test on the language means are given in Appendix F, Table 25. The Nandi speakers used significantly fewer initial verbs than either the Luo or the Lunyore groups.

The main verb preposition/particles proportions are analysed in Appendix F, Tables 26 and 27. A fairly similar pattern of results to the initial verbs can be seen: significant Story Language ($F(1, 131)=38.16$, $p<0.001$) and First Language effects ($F(2, 131)=5.95$, $p<0.05$). In this case it is the Luo speakers who are the odd ones out, with greater use of these elements compared to the other two groups.

The most striking feature of these two analyses is the highly significant Story Language effect. Nevertheless there is also some suggestion of first language influence on the usage of these features.

6.1.6 Frame-by-frame analysis

In order to expand on the bare conclusion that the Kenyan subjects used significantly less Manner verbs than the native speakers, and that this behaviour was more noticeable in the Nandi and Lunyore groups than in the Luo, we shall look briefly at the lexical usage in each frame of the narrative. The full verb usage data will be found in Appendix E. The frames are here grouped in ten phases, according to what would seem to be the natural divisions of the story.

6.1.6.1 Phase one: Departure

*(1) Juma **left** Otieno's home after breakfast (2) and Otieno **walked up** to the main road with him. (3) Juma then **strode off** briskly, whistling happily as he went.*

Some subjects, especially the Lunyore speakers (and Luo speakers on the first retelling), did not mention the departure from Otieno's home as such (variously rendered by others with LEAVE, START, GO, WALK etc.), but began with the two boys walking to the road together (Frame 2). Here the overwhelming preference of the Kenyan subjects for ESCORT is very noticeable, with only one native speaker using this verb. When it came to Juma's initial movement along the road, many Kenyan subjects simply used GO, but the Luo groups favoured WALK on both retellings.

6.1.6.2 Phase two: Following directions

*(4) When he **reached** a signboard he **jumped over** the ditch at the side of the road, just as Otieno had told him, (5) and **took** a narrow path into the bush.*

Most of the Kenyans used the same verbs as the English version in Frame 4—REACH and JUMP OVER. However, nearly all the native speakers switched from REACH to COME TO. CROSS and PASS were used as the second verb in this frame by a fairly small number of the Kenyans, slightly more in the Nandi groups.[2] There was a wide range of usage in Frame 5, with GO, CONTINUE, WALK, TAKE and FOLLOW all being found.

6.1.6.3 Phase three: The Market

*(6) He soon **reached** the small market Otieno had mentioned. (7) Juma thought he had plenty of time, so he **strolled round** the shops and chatted to a few people.*

The native speakers once again preferred COME TO, with REACH favoured by the Kenyans. Many of the latter did not use a motion verb with Frame 7, but simply referred to Juma talking to his friends. Those that did use such a verb tended to be in the advanced groups.

6.1.6.4 Phase four: The Preacher

*(8) Then he saw a crowd that had gathered round a local preacher and he **wandered over** to listen for a while. (9) Seeing that it was getting a bit late, he **squeezed past** two fat women*

[2] One Nandi intermediate subject used OVER as a verb (*tried to over there, crossing the stream*), as young native learners of English sometimes do with prepositions.

A substantial number of native speakers used GO for Juma's movement towards the crowd. This was the most common verb in all the Kenyan groups, sometimes in conjunction with JOIN. As for Juma's movement out of the crowd, native speakers generally followed SQUEEZE PAST, with PUSH or BARGE PAST very much minority choices. SQUEEZE PAST/BETWEEN was more evident in the Kenyan groups on the second retelling, after they had heard it in the English version. PASS or GO were more common on the first retelling. Among the more unexpected verbs used by the Kenyans here were FIX BETWEEN, PENETRATE THROUGH and WEDGE BETWEEN.

6.1.6.5 Phase five: The Madman

*(10) and **hurried round** a corner to **get back** on his path. (11) But he **staggered back** for a moment as the village madman **ran past** him.*

The movement round the corner took a variety of forms, with the Kenyans generally using Path verbs, while the native speakers were divided almost equally between GO and WALK. Not many of the subjects in *any* of the groups mentioned Juma's return to his route. The encounter with the madman was also ignored or treated in a rather sketchy manner by many of the native speakers, for whom this probably represented a rather strange occurrence. The Kenyan subjects, used to the mentally ill being allowed to wander freely, treated the incident more vigorously. RUN was often used for Juma's backward movement, less commonly for the madman's forward movement, which was not always mentioned. The Luo groups were almost unique in their frequent use of CHASE for the latter movement.

6.1.6.6 Phase six: Crossing a stream

*(12) When he **came to** a shallow stream further on, he **waded across** it (13) and **scrambled up** the slope on the other side.*

Native speakers kept to the use of COME TO for arrival at the stream, but this was not common among the Kenyans, though COME with either TO or ACROSS slightly increased in use on the second retelling; REACH was particularly favoured by the Lunyore speakers. For movement through the stream, the native speakers mostly used Manner verbs: as well as WADE, WALK and even PADDLE THROUGH were to be found here. Path verbs, usually CROSS or PASS, were more frequent with the Kenyans and this did not change much between the retellings. In Frame 13, most native speakers used CLIMB UP instead of SCRAMBLE UP and this was also by far the most common verb (often without a

preposition) in all the Kenyan groups; some of the Luo and Lunyore speakers used OVER as the preposition.

6.1.6.7 Phase seven: Wrong turning

*(14) He hesitated when he **came to** a fork in the path but in the end he **followed** the path to the left. (15) However, after some distance he realised his mistake and **ran back** to take the other path.*

The difference which was noted in Frame 12 between native speakers and Kenyans in the use of COME TO was repeated in Frame 14. Once again it was the Lunyore speakers who were the more frequent users of REACH. Native speakers generally preferred TAKE for Juma's choice of path; the Kenyans were divided between FOLLOW and TAKE, with FOLLOW more common in the Nandi and Lunyore groups and TAKE in the Luo groups. Juma was usually described by the native speakers as running back to take the other path, but in all the Kenyan groups RUN was eclipsed by the use of either GO or COME. TURN (or even RETURN) BACK was also quite frequent here.

6.1.6.8 Phase eight: Falling in the mud

*(16) He was feeling rather tired now as he **trudged through** a lot of mud. (17) Unfortunately he **slipped off** the raised path, **fell** on a rock and bruised his leg. (18) Eventually he **crawled back** on to the path, managed to stand up (19) and then **limped away** from the unlucky spot.*

Native speakers generally used WALK for Juma's progress through the mud. Path verbs such as GO, FOLLOW and PASS were more frequent among the Kenyans. The Luo groups made marginally more use of WALK than the others. The majority of subjects in all groups described Juma's accident with SLIP and FALL, though SLIDE was a common alternative to the former for Luo and Nandi speakers. There was a wider range of verbs used in the first part of Frame 18. Native speakers did not particularly favour CRAWL, but this was a fairly common choice for the Kenyans; CREEP also appeared, but only with a few of the Luos. An interesting variant was the occasional use of WAKE UP, found in all the Kenyan groups. The second verb in the frame was mostly either WALK or LIMP for everybody, with WALK being more frequent.

6.1.6.9 Phase nine: Meeting John

*(20) He soon met his classmate John **leaving** his home. (21) John **invited** him **in** to have a rest and a cup of tea. (22) Afterwards, feeling much better, Juma **set off** for school **with** John.*

Not many subjects in any group mentioned John's leaving home; those that did generally used COME. In all the Kenyan groups WELCOME was preferred to INVITE, often without an accompanying particle. For Frame 22, ESCORT appeared again in all the Kenyan groups, though less strongly than it did in Frame 2.

6.1.6.10 Phase ten: Arrival at School

(23) As they were now very late, they ***sneaked round*** *the back of the headmaster's house, which was just outside the school compound. (24) Then they* ***raced to*** *the school gate and were surprised to see a notice saying that the school would re-open the following week.*

Most native speakers followed the English version in using SNEAK for the boys' furtive movement behind the headmaster's house. A couple of Luo and Lunyore subjects did use this verb on the first retelling. Only the Lunyore group made much use of it in the second retelling, but even for them PASS was equally common. There was generally very little increase in the use of Manner verbs in this frame in the second retelling. RUN was the favourite choice for all groups in the final frame, but REACH was also quite frequent in the Kenyan groups.

6.2 The sentence-completion task (Task B)

Preparing the data from this task for analysis was considerably simpler than it was for Task A. Handwriting was occasionally difficult to interpret, but in general the transcribing of the written responses from the individual subjects' sheets to the database was a straightforward operation.

It was also indicated in section 5.4.1.2 that four of the items in this task were included in order to reduce the otherwise total concentration on the lexicon of locomotion. Although the responses to these items are of considerable interest as indicators of lexical variability as well as levels of interlanguage proficiency, they are not relevant to the semantic area under review and were not included in the data analysis.

6.2.1 Overall verb use

A total of 149 verb types were used in Task B by the Kenyan subjects, with a Type/Token ratio of 0.06. It should be noted that non-verbs were used in 1.9% of the total number of responses. These were mostly adjectives and occurred especially in sentence 5. However, of the 149 verbs, a considerable proportion —44.3%—were used only once. There were 40 verbs which were used on more than five occasions and these are listed in Table 6.4 with frequencies for each of the experimental groups. They consist of 21 Path type motion verbs, 15 Manner type (highlighted in the table) and 4 others.

As would be expected, certain verbs, like GO and WALK, have high frequencies in all groups. The high figures for CROSS reflect the fact that this is a fairly obvious candidate for both sentences 1 and 8. The use of ESCORT by the Kenyan groups (exclusively here in sentence 19) has already been mentioned with regard to Task A (6.1.6.1 and 6.1.6.9). Other verbs used only by the Kenyans include APPROACH, BOARD, DASH and RETURN.

The table also shows differential usage between the Kenyan groups. Thus PASS was used more heavily by the Luo and Lunyore lower level groups. MOVE was particularly used by the Luo teacher trainees (more will be said about the performance of this group in section 6.2.3).

Table 6.4 Overall verb frequencies in Task B

	DLS	NAS	YRS	DLT	NAT	YRT	MT
(no of subjs)	(24)	(25)	(29)	(26)	(30)	(24)	(68)
1 alight	8	2	5	7	10	8	8
2 approach	7	0	1	9	9	8	0
3 bend	5	0	3	0	2	1	0
4 board	3	5	2	3	6	6	0
5 catch	2	1	4	5	3	2	3
6 climb	**5**	**0**	**1**	**2**	**2**	**7**	**11**
7 come	15	13	15	28	26	18	55
8 crawl	**2**	**3**	**3**	**1**	**12**	**9**	**17**
9 creep	**1**	**0**	**1**	**3**	**4**	**1**	**1**
10 cross	27	41	22	36	39	23	70
11 dash	**2**	**0**	**0**	**3**	**7**	**3**	**0**
12 drag	**0**	**0**	**5**	**3**	**2**	**0**	**0**
13 drive	0	1	3	2	2	1	9
14 enter	7	9	9	3	2	3	10
15 escape	1	1	5	2	0	0	0
16 escort	21	17	22	19	21	22	0
17 fall	1	3	2	0	0	0	0
18 follow	20	19	24	10	14	15	26
19 get	15	12	19	12	10	10	72
20 go	23	34	37	31	26	17	108
21 hurry	**8**	**0**	**1**	**1**	**4**	**0**	**3**
22 jog	**12**	**1**	**7**	**20**	**14**	**24**	**62**
23 jump	**20**	**29**	**35**	**23**	**33**	**36**	**73**
24 leave	3	3	1	6	2	4	5
25 look	1	2	9	1	0	2	3
26 move	3	10	9	25	5	5	11
27 pass	20	9	15	7	12	4	18
28 reach	2	0	1	0	0	1	6
29 retreat	0	0	0	1	2	2	1
30 return	8	10	12	3	7	10	0
31 run	**13**	**10**	**12**	**3**	**13**	**10**	**61**
32 rush	**2**	**2**	**4**	**0**	**2**	**1**	**2**
33 sneak	**0**	**0**	**2**	**0**	**0**	**1**	**3**
34 stop	3	4	2	2	3	0	3
35 stroll	**4**	**1**	**3**	**2**	**6**	**0**	**5**
36 take	0	4	2	3	2	1	28
37 travel	9	13	6	17	14	9	15
38 trek	**2**	**0**	**0**	**2**	**1**	**3**	**0**
39 turn	9	8	8	7	12	9	15
40 walk	**64**	**70**	**93**	**55**	**63**	**57**	**195**
OTHER VERBS	43	49	56	35	42	30	102
NON-VERBS	8	12	3	6	14	4	41
NOT ATTEMPTED	1	2	0	18	32	1	46
TOTALS	400	400	464	416	480	368	1088

6.2.2 Verb use in individual sentences

Verb use in individual sentences was analysed for significant differences by means of chi square tests. As explained in 5.5.2, this involved the construction

of frequency tables with expected cell counts that were not too low for these tests to remain valid. To achieve this, verbs with low frequencies often had to be combined, but this was done as carefully as possible to avoid distortion of categories. For one sentence (11), the large number of choices made meaningful chi-square analysis impossible; it therefore had to be excluded.

The chi square tests results are summarized in Table 6.5. It can be seen that significant results were obtained on 11 of the sentences (i.e. 73.3%) for a comparison of native speaker and Kenyan frequencies. These were well distributed over the Path Types (see below). Comparisons between the Kenyan language totals were significant on 8 sentences (53.3%); however 3 were of one Path Type (Type V). The separate comparison of education level frequencies was significant on 9 of the sentences (60%), half of them being Type V. The chi square test results for this task are given in full in Appendix H.

Table 6.5: Summary of chi-square test results for Task B

Sentence	S vs T	DL vs NA vs YR	KEN vs MT	Verbs
1	n.s.	*	n.s.	cross / jump
3	**	n.s.	***	alight / jump
4	**	***	***	go, move, get
5	***	***	***	jog / walk
6	n.s.	*	n.s.	P/M
7	***	n.s.	n.s.	come / pass
8	n.s.	**	*	cross /P/M
10	*	*	n.s.	P/M
11	–	–	–	–
12	n.s.	n.s.	***	come, go /P/M
13	*	*	**	follow / walk
15	**	n.s.	***	go / turn /P/M
16	*	n.s.	**	P/M
17	n.s.	n.s.	***	get / M
19	n.s.	n.s.	***	P/O
20	***	**	***	jog / walk
% sig.	**60.0**	**53.3**	**73.3**	

Although all three comparisons achieved a clear majority of significant results, we can be most confident about the contrast between the lexical

behaviour of the Kenyans generally and the native speakers. Of the 15 sentences tested, only four failed to come up with a significant difference.

In order to make the analysis of the data for individual sentences more meaningful in terms of the linguistic framework employed in this study, the items will be discussed in groups according to the types of motion event listed in 3.2.3.1. Thus end-point types—Path Types I and II—will be dealt with first (Section 6.2.2.1), then intermediate point types—Path Type III (Section 6.2.2.2), next route types—Path Type IV (Section 6.2.2.3) and finally path-neutral types—Path Type V (Section 6.2.2.4).

6.2.2.1 End-point types

In these types of motion events the focus is on the source or the goal or on both. In Task B there is a pair of sentences (3 and 17) with one particular type of reference object as either source or goal, another sentence focused on the goal (11) and one involving both source and goal (6).

The first two sentences to be considered form a pair in which a particular type of reference object—a vehicle—is alternately the source and the goal of the movement:

(3) It is dangerous to try to _____ from a moving vehicle.

(17) We managed to _____ on the bus just before it left for town.

For this type of reference object special end-point motion verbs exist in English: ALIGHT and BOARD. These are, however, rather formal choices for most native speakers, being found, for example, in notices on some buses. Since the vehicle in (3) is moving, a more natural choice of verb is JUMP, while for (17) colloquial English would seem to prefer GET.[3]

JUMP was in fact the favourite choice in (3) for all groups, particularly the native speakers and the Nandis. But ALIGHT, not used by any native speaker probably because of its formality (even though the context might seem to suggest a degree of formality), came a strong second in most Kenyan groups. A rather curious feature of this sentence is the use of RUN by no less than 9 of the native speakers (and only two Kenyans); this would only make tolerably good sense if the human figure is taken not to be getting off the vehicle but located somewhere on the road on which the vehicle is passing.

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[3] CATCH is ruled out here by the preposition, which did not prevent it being chosen by several Kenyan subjects and even three native speakers, who perhaps may not have noticed the preposition.

In sentence 17 GET was, as might be expected, the choice of 75% of the native speakers; it was also the most popular choice among the Kenyans, although its frequency ranged from 30% in the NAT group to 52% in the YRS group. The illogical use of ALIGHT was found in four of the Kenyans, all Nandi speakers. The use of CATCH has already been mentioned. The special verb BOARD is also ruled out here by the preposition; its use by a number of Kenyan subjects seems to indicate that, for them, this syntactic constraint does not exist. The verbs CLIMB and JUMP, which both had several takers, might be appropriate in certain contexts.

Another example of an end-point type, sentence 11, as already mentioned, proved to have rather too many possibilities for meaningful chi square analysis:

> *When the driver called him, the small boy* _____ *the car fearfully and whispered the name of the place.*

Perhaps the context was not explicit enough for the expected choice of APPROACH. This was the most frequent choice for the Kenyan subjects, at least the advanced groups. Surprisingly, not one of the native speakers used it; in fact 17.6% of them did not attempt this item at all. ENTER was chosen by several subjects in the Kenyan and native speaker groups.

Sentence 6 presents a source-and-goal focused motion event:

> *In the old days it was quite common for people to* _____ *from here to* [a nearby town] *and back in a day.*

Here 70% of the native speakers chose a Manner verb, usually WALK. This proportion was actually exceeded by three of the Kenyan groups: YRS, YRT and NAT. Only one group—NAS—had less than 60% choosing a Manner verb. Although WALK was by far the most popular choice, there were two other Manner verbs used by a few of the Kenyans but none of the native speakers: FOOT and TREK; the first of these is virtually obsolete as a verb in modern English, while the second is not very common.

6.2.2.2 Intermediate point types

There were two sentences in Task B which involved traversing a linear object; in sentence 1 this was a stream and in sentence 8 it was a railway line.

> *(1) Because of the heavy rain, the children were unable to* _____ *over the stream to get to school.*
>
> *(8) The boys had to* _____ *over the railway line in order to get to John's house.*

In the initial piloting of these sentences, *over* was not included. However, after obtaining a majority of responses with CROSS, it was decided to insert the preposition in order to allow for a wider range of verbs. Unfortunately this means that CROSS fits less appropriately into the gap, as *over* is practically redundant with this verb and is rarely used with it in this sense. Despite this, CROSS remained the most popular verb in responses to the final version of these sentences, even among native speakers.

With sentence 1 the popularity of CROSS was spread across all groups. The Nandi and native speaker groups showed the highest frequencies, but this was not significant on a chi-square test. The second most popular choice, JUMP, had significantly more use among the Lunyore groups than among the others (χ^2=8.33, df=1, p<0.01). PASS was used by several of the Kenyans but none of the native speakers.

CROSS was used in sentence 8 by 58.2% of the Kenyans and 45.6% of the native speakers. Although the native speaker frequency was lower, no other verbs had very much support, apart from WALK and RUN.[4]

Another intermediate point type occurs in sentence 7:

If you ever _____ *this way again, don't forget to visit us.*

The two most obvious choices, COME and PASS, are both Path verbs. Indeed, apart from a single occurrence of DRIVE, no native speaker used a Manner verb in this sentence; there were just four occurrences of Manner verbs in the Kenyan groups. The verb GO, which might be regarded as deictically inappropriate here (although it is possible to think of a possible context for it), was used by two Kenyans and 7(!) native speakers. FOLLOW and VISIT were used by a handful of Kenyans.

Essentially, though, it came down to a choice between COME and PASS. COME had more takers than PASS in all groups and there were no significant differences on this between them, except that the Kenyan teacher groups made significantly more use of COME than the secondary school groups (χ^2=21.64, df=2, p<0.001).

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[4] The use of RUN (by 16.2% of the native speakers) may have something to do with the fact that in Britain crossing a railway line on foot, apart from at level crossings, is probably a less common practice than in Kenya and may even be illegal; it is interesting, though, that the only use of SNEAK in this sentence occurred with a Lunyore speaker.

6.2.2.3 Route types

The focus on these types is on the route itself, rather than on any end or intermediate points. A figure moves along or 'alength' an extent which can be bounded or unbounded.

In sentence 13 the motion is along an unbounded extent:

She told us to _____ the road for a few kilometres until we saw the lake.

There were no significant differences in Path and Manner verb use. Path verbs were used by the majority of subjects, with rather higher percentages for the Kenyan groups, the favourite verb being FOLLOW (with TAKE coming a close second for the native speakers).

A number of sentences involved motion along an extent bounded by an end point (goal). With sentence 19

I _____ the visitor to the bus stop and then came back home

the significant difference was between the Kenyans as a whole and the native speakers. ESCORT, the overwhelming preference for the Kenyans, was not chosen by a single native speaker. The favourite verbs for the native speakers were WALK and TAKE, with a clear preference for WALK by the Scottish subjects, which probably reflects dialectal differences.

Sentence 12, on which the DLT group show a very clear difference from all the others in its preference for Path verbs, will be dealt with below (section 6.2.3).

A large number of verbs—more than 30—were used in sentence 4:

The policeman had to _____ right under the lorry in order to rescue the injured man.

GO, CRAWL and GET were the most popular choices overall. There were noticeable differences, however, between the Kenyans and the native speakers, as well as among the Kenyan groups. The lower level groups generally used more non-locomotion verbs such as BEND and LOOK than did the higher level groups, except NAT. The Nandi and Lunyore higher level groups were like the native speakers in using a higher proportion of Manner verbs, particularly CRAWL.

For sentence 15, which involved a change of direction, the choice of a Path verb was almost inevitable:

The flooded path forced us to _____ back and go round the longer way to school.

In fact all the Kenyan groups showed an overwhelming preference for Path verbs. This preference was also quite strong among the native speakers, though significantly less than the Kenyans (χ^2=4.675, df=1, p<0.05). The Path verbs used were mainly GO and TURN. For the Kenyans, especially the lower level groups, an additional Path verb was RETURN, which, for native speakers is ruled out here by the preposition *back* (for a further example of this Kenyan usage see above, section 6.1.6.7). The deictically possible COME was used by a few subjects, half of them in the DLT group.

Sentence 16 was framed in such a way as to make a Manner verb the most likely choice for a native speaker:

After a hard day's work, the farmer _____ wearily home.

The use of REST, RELAX and SLEEP by a total of 11 Kenyan subjects suggests that they read the sentence as ending *at home.* 62.9% of the native speakers did choose a Manner verb, though this was usually WALK; the more expressive TRUDGE and PLOD occurred only once each. As a whole the Kenyans made significantly more use of non-Manner verbs on this item (χ^2=12.39, df=2, p<0.005), with only the DLS group having a Manner verb frequency as high as 48% (compared to a mean of 34.4% for the others).

6.2.2.4 Path-neutral types

Only three sentences could be classed as path-neutral.

In sentence 10 the time element is being highlighted:

The children _____ for more than an hour without seeing any villages.

WALK was by far the most popular choice (70% of the native speakers and 76% of the DLS group). Two other Manner verbs, RUN and TREK, were used by a small number of Kenyan subjects.

Once again DLT was the odd one out in showing fewer Manner verb choices than its corresponding lower level group. The Lunyore speakers at both levels showed a stronger preference for Manner verbs than the Nandi speakers, though this is not statistically significant.

The two other path-neutral sentences focus on the manner of locomotion:

(5) Although he wasn't really running, he was certainly _____.

(20) That man isn't running very fast, he's just _____ along.

The first of these elicited a high proportion of non-verb responses among the native speakers and also the Nandi groups, such as INJURED, TIRED and, especially for the native speakers, FAST. The most popular verb was JOG, at least among the higher level groups and the native speakers. This was also a popular verb in sentence (20), but was eclipsed by WALK in the NAS and YRS groups.

6.2.3 Path and Manner verb use

Although Task B was not designed for this purpose, it seemed worthwhile to calculate the Path and Manner verb usage of individual subjects to see how it compared with the results for Task A. A two-way Analysis of Variance model was adequate for this Task, with just the two variables of First Language and Educational Level to be considered. The results of the ANOVA are given in Appendix H. While they do show a significant First Language effect ($F(2,152)=5.44$, $p=0.005$), there was also a significant interaction between Language and Education ($F(2,152)=4.83$, $p=0.009$).

As can be seen from Figure 6.5, this interaction arises from the smaller use of Manner verbs by the Luo trainee group compared to the secondary school group. The other two languages showed greater use of Manner verbs by the higher level groups, which, as we have seen, was also a clear trend in Task A.

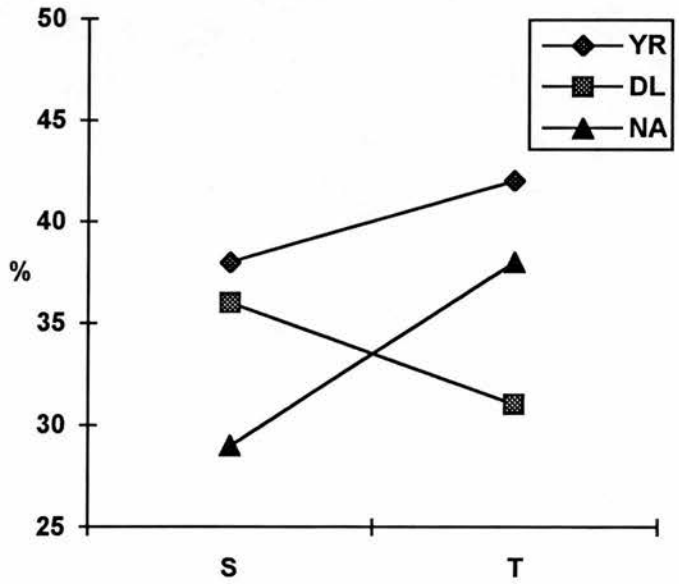

Figure 6.5 Manner verb mean percentages for Task B groups

The equivalent ANOVA for the Path verb percentages shows a clear First Language effect ($F(2,152)=4.402$, $p=0.014$) with no significant interaction ($F(2,152)=2.578$, $p=0.079$).

A closer investigation of the data for individual items showed that with sentence 12,

> *I saw the thief* _____ *towards the open door while the shopkeeper was busy with a customer*

where there was generally a preference for Manner verbs, particularly among the DLS, YRS and YRT groups, one group—the Luo teacher trainee group (DLT)—showed just the opposite tendency (see Table 6.6).

Table 6.6 Verb frequencies for Task B, sentence 12

	DLS	DLT	NAS	NAT	YRS	YRT	MT
Path	2	17	11	9	10	5	28
Manner	21	7	14	16	18	17	39
other verbs	2	1	0	5	1	1	0

The difference here accounts to a large extent for the significantly smaller use of Manner verbs by the DLT group compared to DLS, whereas for the Nandi and Lunyore speakers Manner verbs were used more in their higher level groups. Indeed if the ANOVA on Manner verbs is run without the data for sentence 12, the significant interaction disappears, leaving only First Language and Educational Level as significant main effects ($F(2,152)=5.369$, $p=0.006$ and $F(2,152)=5.428$, $p=0.021$, respectively), compared to the interaction ($F(2,152)=2.398$, $p=0.094$).

It is difficult to see why this particular item should have produced such a response from the DLT group. When the test was given to 17 Luo students at a secondary teachers college (about undergraduate level) the preference for Manner verbs on this item was just as strong as it was in the other groups in the main study (12 Manner against 5 Path). So the response pattern of the Luo group in the main study is clearly anomalous.

There is another factor here which needs to be considered. The mean DLS Manner verb percentage for Task B (including sentence 12) is 36.28. However, the corresponding figures for the two school sub-groups making up the DLS group are 29.55% and 41.99%. The difference between these two means is significant at $p<0.05$ on a two-tailed t-test. No other sub-group difference was significant either for Task A or Task B.

6.3 Summary

In the Story Retelling task (Task A), all the Kenyan learner groups made significantly less use of Manner verbs of locomotion than the native speaker groups tested. This was the case on both retellings, but there was a significant increase on the second retelling. Among the Kenyan groups, the Luo speakers made relatively more use of Manner verbs. The advanced groups in general had a higher rate of Manner verb use. This task also showed a significant difference between the Kenyans and the native speakers in the use of particular locomotion verbs and in the use of other sentence elements.

The Sentence Completion task (Task B) produced significant chi square results on a number of items, showing differences between the Kenyans and the native speakers, among the Kenyan language groups and between the two proficiency levels. The relative use of Path and Manner verbs showed a different pattern from Task A; part of this difference could be attributed to the anomalous performance of one group on a single item.

CHAPTER SEVEN

ANALYSING THE LEXICAL RECEPTION DATA

The data to be described in this chapter is quite different from that in the last. The tasks which provided the data required subjects to make explicit judgements about the linguistic items they were shown: in the first, judgements as to the acceptability of sentences that were possibly semantically anomalous, and in the second, judgements as to which sentences could be grouped together according to their perceived similarity of meaning.

Furthermore, these tasks were only given to subjects at the higher level of proficiency — the teacher trainees. This means, therefore, not only that there was less data to process than in the production tasks (though certain additional data was obtained), but that it is not possible to observe possible developmental trends in the response patterns.

7.1 The sentence-judging task (Task C)

This task consisted of 30 sentences displayed briefly one at a time, on which subjects had to make immediate simple yes/no acceptability judgements. The task was performed by a total of 74 subjects in the main study: 25 Luo, 28 Nandi and 21 Lunyore speakers. Additional Kenyan data came from a smaller study carried out at another teachers college (Siriba) immediately after the main one: 32 subjects participated, but there was considerable imbalance in the numbers of the groups—only four Lunyore speakers taking part—which means that no substantive conclusions can be drawn from it. Native speaker data obtained under similar experimental conditions was provided by children at two schools in the Edinburgh area (48 subjects).

It was also decided to obtain further native speaker data from a Scottish and an English school using a different methodology which allowed more time for decision-making. This data cannot of course be used for direct comparisons with the other groups but provides an interesting comparison with the experimentally 'correct' native speaker group. These subjects—65 in all—were given individual copies of the set of sentences and asked to make a judgement

on them with no specific time limit. Unlike the straight yes/no choice of the main study, there were five possible responses. The instructions were that if they made up their minds straight away they should tick either A (Yes) or E (No), but that if they had to think about it longer or changed their minds, they should tick either B (Yes) or D (No). There was also an option to tick the C box if they were not sure.

The acceptability percentages for all the groups tested are given in Appendix J. It is possible to gain a rough picture of the degree of agreement between the groups by an examination of their paired scatterplots (Fig.7.1). The native/non-native speakers plot is well spread-out, while the Kenyan inter-groups plots are more closely packed. This impression is borne out by the Pearson product-moment correlations, given in Table 7.1. There are moderate correlations between the native and non-native speaker groups but higher correlations between the Kenyan groups, especially the Luo and Nandi groups. Not surprisingly, therefore, a one-way ANOVA on the four groups using all the items was far from significant ($F(3, 116)=0.30$, $p=0.822$).

Table 7.1 Correlations between group acceptability percentages

	DL	NA	YR
NA	0.877		
YR	0.808	0.810	
MT	0.634	0.673	0.631

Critical value = 0.360

As explained in 5.4.1.3 above, the items had been grouped in four categories according to the researcher's intuitions, although the actual order in the task was scrambled. These intuitions were not, as we shall see, fully borne out by the data. The items in the first and last categories, where it was predicted that there would be agreement between native and non-native speakers, generally ran according to expectations. There were, however, some noticeable differences. For items 1—*Walking is a very good form of exercise*—and 11—*The drunken man staggered into the room and collapsed on the bed*—the Lunyore and Luo groups respectively had rather lower acceptance rates than the others (the Siriba Luos having an even lower rate for item 11). More surprising was the greater acceptance of item 24—*The boys raced slowly towards the gate*—by all the Kenyan groups, which led to its reassignment to category III (see below).

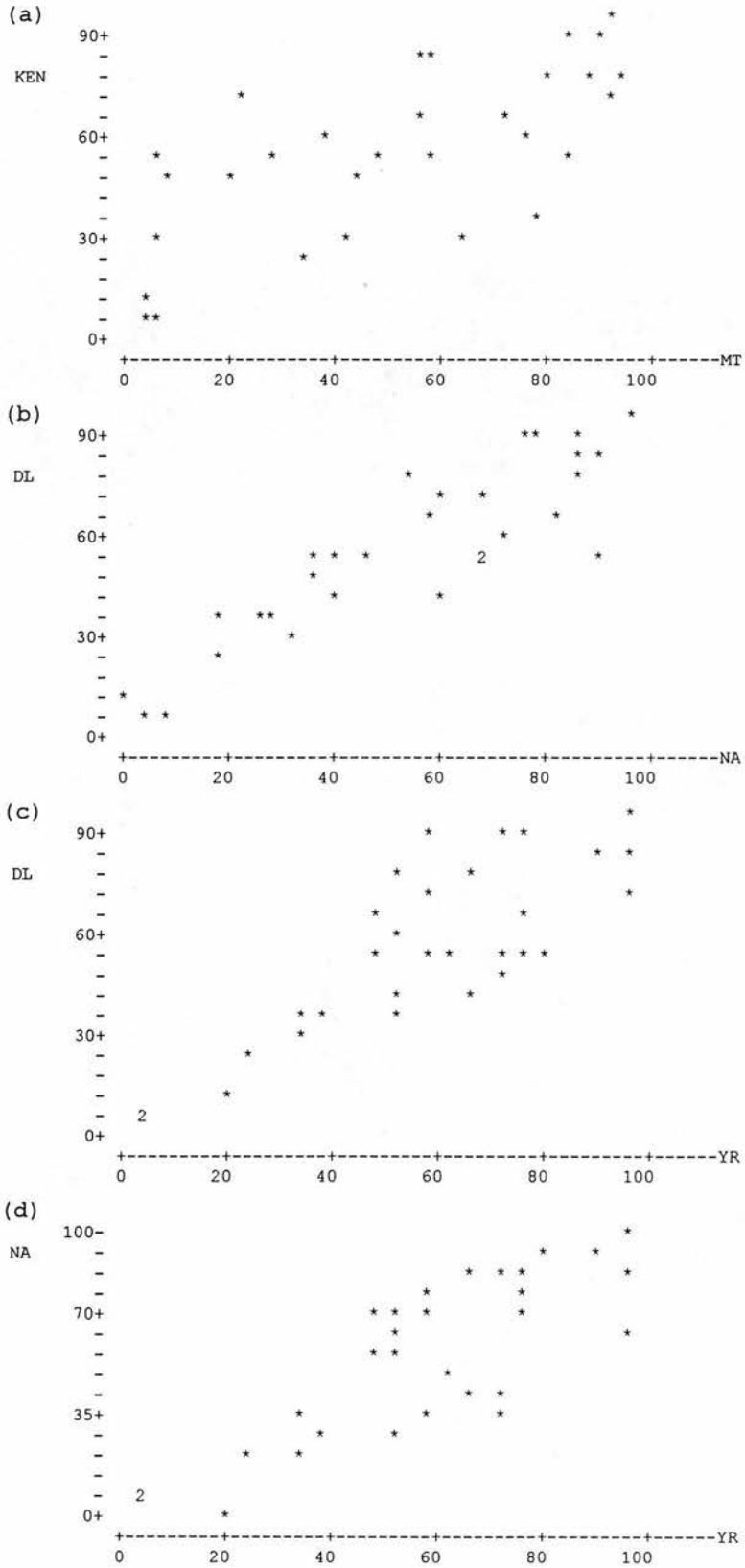

Figure 7.1 Scatterplots for acceptability percentages

(a) KEN v MT (b) DL v NA (c) DL v YR (d) NA v YR

It was the areas of disagreement—Categories II and III—in which most interest lay. However, taking them as originally constituted did not show significant differences. The F value for Category II was very low ($F(3,32)=0.15$, $p=0.927$), while that for Category III was still below significance ($F(2,28)=2.47$, $p=0.083$). It was only by reallocating items on the basis of actual responses that more interesting results could be obtained. Thus, a severely pruned Category II, consisting of just five items, four from the original category and one from Category III (item 28), gave a significant result ($F(3,16)=4.44$, $p=0.019$). An even better result came from a newly constituted Category III, formed by dropping three of its original items and adding one each from the former Categories II (15) and IV (24): $F(3,24)=7.85$, $p=0.001$. Details of these ANOVA tests, as well as the chi-square tests below, will be found in Appendix J.

We may now look at the reconstituted categories in more detail, starting with the much-reduced Category II.

7.1.1 Items less acceptable to the non-native speakers

6. He circled the house twice before he went in.
18. He walked the streets from morning till night looking for work.
23. He passed the church but did not go in.
27. Every day she has to tread the same path through the woods to school.
28. We reached the shore and descended from the boat.

Two of the items in this category contained Manner verbs. As expected, the first of these (no. 18) proved a stumbling block for many of the non-native speakers, the Luos and Nandis in particular (including the smaller Siriba samples); the difference between native speakers and Kenyans was significant ($\chi^2=20.80$, $df=3$, $p<0.001$). There was also a slightly lower acceptance rate of the other Manner verb item (no. 27) the Kenyan groups, particularly the Lunyore speakers.

The difference between native and non-native speakers on item 23, with the path verb *pass*, was not large but it was significant ($\chi^2=13.24$, $df=3$, $p<0.005$). Although this item does not show the prototypical sense of *pass*, most native speakers seemed to have no difficulty in accepting the item. But the Kenyans, especially the Nandi group, were more divided about it. However, if we look at item 26 — *He was going to pass them by but changed his mind and stopped* — which has been reallocated to Category I, we find that although it is closer to

the prototypical sense, the experimental native speaker group was divided about it, perhaps because of the qualification introduced by *but*. Certainly the non-experimental group had much less difficulty with it. Another item with *pass*, now allocated to Category I (from Category III) was 5: *We were unable to pass to the other side of the valley*. Although the researcher found it an awkward expression, nearly three-quarters of the native speakers accepted it. Among the Kenyans, it was the Luos who had the lowest acceptance rate (52%) on this item.

Finally, there were two other items containing path verbs. Item 6 had a two-thirds acceptance rate with the native speakers (even higher in the non-experimental group) but with the Kenyan groups the acceptance rate was only between a quarter and a third ($\chi^2 = 13.18$, df=3, $p<0.005$). With item 28 the researcher's intuitions were once again at variance with those of his native-speaking subjects and his prediction about Kenyan responses also proved incorrect. Since *descend from a boat* can be translated more literally in the Kenyan languages, it was thought that this would make the item more acceptable to many of the Kenyans. However, the overall acceptance rate for them was only 51.4%, dropping to 45% for the Luos. (The figures were also low for the Siriba sample).

Item 2, with *cross* used successively with a plane surface (*field*) and a linear object (*stream*) had been expected to cause some difficulty for non-native speakers with semantically restricted equivalent verbs, unlike the more straightforward item 13. But only the Lunyore group showed a lower acceptance rate (57%), so both 2 and 13 are now in Category I.

7.1.2 Items more acceptable to the non-native speakers

7. *The injured man was unable to go and had to be taken in a wheelchair.*
12. *We all decided to walk there on foot.*
14. *My friend needed a change, so he went for a walk in* [a neighbouring country].
15. *He climbed down the broken ladder very carefully.*
19. *If you pass that road a little way, you'll soon see his home.*
24. *The boys raced slowly towards the gate.*
25. *They loitered past the house all day.*

We now turn to Category III. Three items included the act or ability of walking, though in one it is only implied. Item 12, with *walk on foot*, would certainly have been normal in Middle English and, as was noted earlier (section 3.2), the expression continued in use up to the last century. It is nevertheless rather puzzling that 58.6% of the native speakers accepted it (a proportion rising to as high as 76% in the non-experimental group). However, the Kenyan groups showed an even higher rate of acceptance, reaching 92% for the Luos ($\chi^2 = 9.74$, df=2, $p<0.05$). *Going for a walk in a neighbouring country* (item 14), on the other hand, sounded strange for the great majority of native speakers, while a high proportion of the Lunyore group and a good number of the other Kenyans found it acceptable; there were significant differences between native speakers and Kenyans overall ($\chi^2 = 29.58$, df=3, $p<0.001$) as well as among the Kenyans ($\chi^2 = 6.18$, df=2, $p<0.05$).

The majority of the native speaker group did not accept item 7, with its apparent contradiction. But 80% of the Luo group gave it their approval.

The results from item 15 were unusual in that they showed a large difference in the native speaker responses, depending on whether they had been obtained under the earlier test condition or not. The low acceptance by the experimental group can perhaps be accounted for by a reading of *broken* in its fullest sense, leading to 'real world', rather than semantic, incompatibility: it is clearly not possible to climb down a ladder that has completely fallen apart. The other group of native speakers had more time to process the sentence and could therefore allow for a less extreme reading of *broken.* As for the Kenyans, it was only the Luo group which showed clearly divided opinion on this item ($\chi^2 = 10.30$, df=2, $p<0.05$).

Another sentence with *climb* (item 3) had been predicted to belong to Category III, but although the acceptance rate was higher for the Kenyans, it did not exceed 36% in any group.

Two other items with manner verbs which were considered to be semantically anomalous attracted a higher degree of acceptance from the Kenyan groups. Item 24, with an apparent clash between *race* and *slowly*, nevertheless had a score of around 60% in the Luo and Nandi groups ($\chi^2 = 33.21$, df=3, $p<0.001$). It was thought that item 29, with a somewhat similar clash between *run* and *slowly*, would cause more of a problem for the Kenyans. In fact it achieved much higher scores in their groups than it did with the experimental native speaker group. The non-experimental native speaker group did however give this sentence a higher rating.

The use of *loitered* with *past* in item 25 proved particularly acceptable to the Lunyore group ($\chi^2 = 12.89$, df=3, $p<0.005$).

Finally, we have item 19, with its anomalous use of *pass*. No group showed a high rate of acceptance, but over half the Luo and Lunyore samples did accept it ($\chi^2 = 12.81$, df=2, $p<0.01$). This can be compared with the differences of opinion regarding item 23 in Category II above.

7.2 The card-sorting task (Task D)

This task was performed by a total of 93 Kenyan subjects in the main study (32 Luo, 35 Nandi and 26 Lunyore speakers). Native speaker data was once again provided by children at two schools in the Edinburgh area (31 subjects), all of whom had taken part in the sentence-judging task.

As explained in 5.4.1.4 above, for this task individual subjects were handed a set of twenty cards each bearing a contextualized motion verb and asked to arrange them in groups of similar meaning. They were told they could make as many groups as they wished and put any number of cards in each group. Apart from this they were not given any further explanation of what was meant by similarity of meaning. Nearly everybody set about the task quite readily. Subjects worked independently but were often in the same room as others doing the same or other tasks. They took between three and ten minutes to make their groupings. No time limit or other constraint was imposed on them. Some spent quite long periods deciding on the allocation of one or two cards or, in rare cases, made complete rearrangements. At the end a few indicated that they were not completely happy with their final choice or pointed out that other orderings would have been equally good. The number of piles made ranged from 3 to 15, with an overall mean of 7.96 and a standard deviation of 2.54; the small differences between the group means were not statistically significant.

The individual sorting records were used to construct a similarity matrix for each group, each cell of the matrix showing the number of subjects who had put that particular pair of items in one pile. By way of illustration Table 7.2 gives the raw data for the native speakers (Appendix K has the figures for all the groups). This shows that, for example, 26 subjects sorted LIMP[1] and STAGGER together, whereas only 3 put COME and WANDER in the same pile. It is possible to draw conclusions directly from this data, but cluster analysis enables this to be done in a more orderly way.

[1]For convenience, the verbs are given here in their base form, although the past tense forms were used in the sentences on the cards (see 5.4.1.4).

Table 7.2: Similarity matrix for native speaker group

```
 A advanced
 5  B came
 0  1  C crept
 3  0  0  D dashed
 7  1  0  9  E escaped
 5  0  0 23 10  F hurried
 3  2  1 16  7 15  G jogged
 2  0  8  1  1  1  2  H limped
 8  4  2  5  4  4  7  1  J marched
 9 10  1  3  3  2  4  2  5  K moved
11  9  1  2  3  2  3  3  4 11  L passed
 4  0  0 25  8 25 16  0  3  2  1  M ran
 6  8  0  2 10  2  1  1  1  2  2  1  N returned
 1  2  6  1  1  1  2 26  2  3  2  0  2  P staggered
 5  6  7  2  1  2  4  6  7  8  7  1  3  8  R strolled
 1  3 23  1  1  1  2  8  2  4  1  0  2  9 10  S tiptoed
13  4  1  5  6  5  5  1 10  9  8  4  5  1  9  1  T travelled
 8 10  3  1  1  1  3  2  8 15 13  0  2  4 18 10  5  U walked
 3  3  4  1  3  1  2  5  7  6  4  0  3  6 15  9  5  9  V wandered
 7 20  3  0  2  0  2  1  4 15 13  0  3  1  5  7  3 10  4  W went
```

7.2.1 Cluster analysis

Because of the large amounts of computation involved, cluster analysis is only practical with a computer program. I used the CLUSTER program on the SPSS-X statistical package. This program can produce several kinds of output, but probably the most useful and easiest to understand is the tree graph or dendrogram. Figures 7.2–7.5 are based on the dendrograms produced using the method of group average linkage, which avoids the extremes of single and complete linkage — these tend to produce chain-like clusters and over-compact clusters respectively — and is recommended for general use by, among others, Kaufman & Rousseeuw (1990).

For the native speakers six clusters of from two to four items stand out quite clearly; these merge together with the outlying items to form three large clusters. A similar statement can be made about the Luo speakers, except that the content of the clusters is in some cases quite different. The grouping of LIMP with STAGGER and subsequently with CREEP and TIPTOE is common to both; indeed these two pairs are clearly seen in all the groups, but do not coalesce in the case of the Nandi speakers. However, for the Luos COME and GO only join up in the larger cluster, while RETURN — an outlier in the native speaker group — is closely linked to COME.

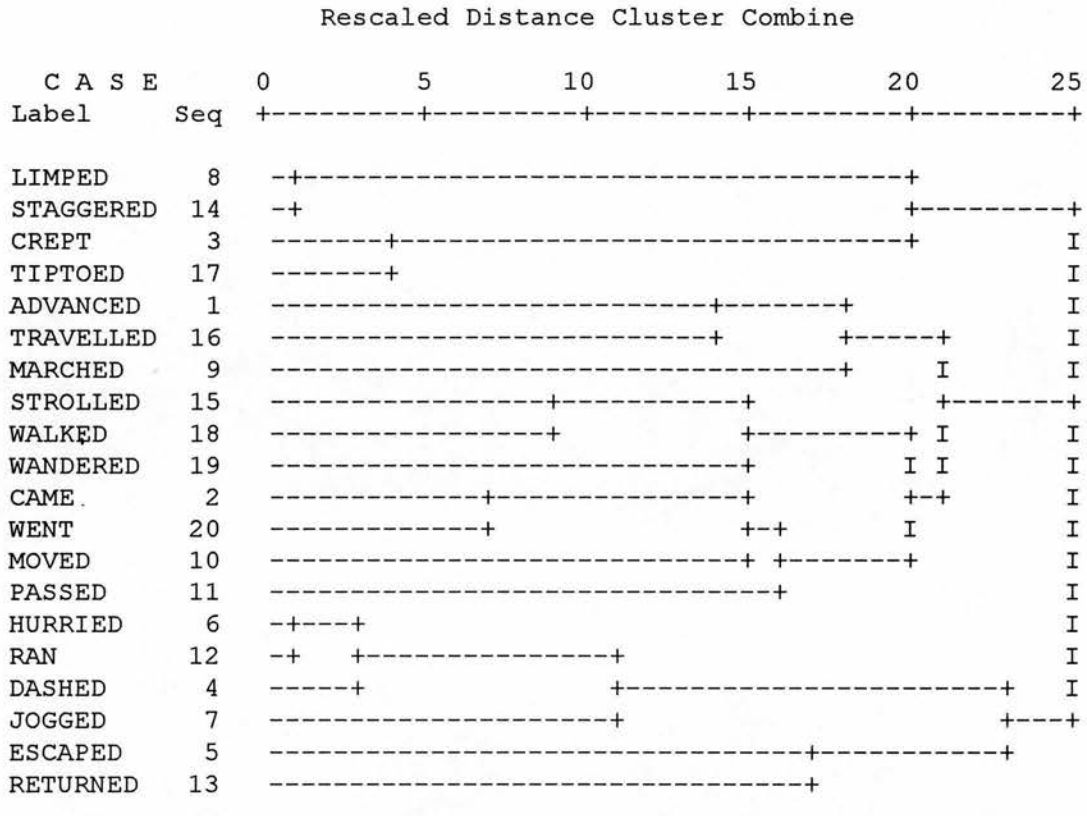

Figure 7.2: Dendrogram for native speaker group using Average Linkage

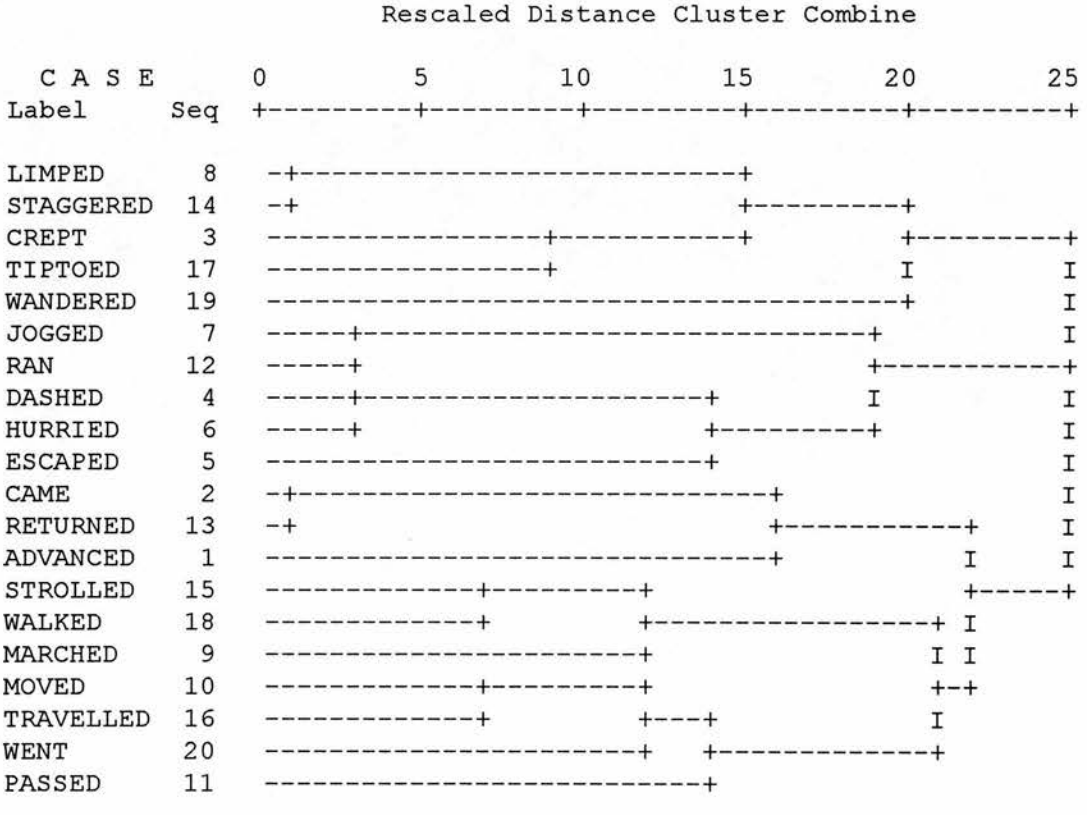

Figure 7.3: Dendrogram for Luo speaker group using Average Linkage

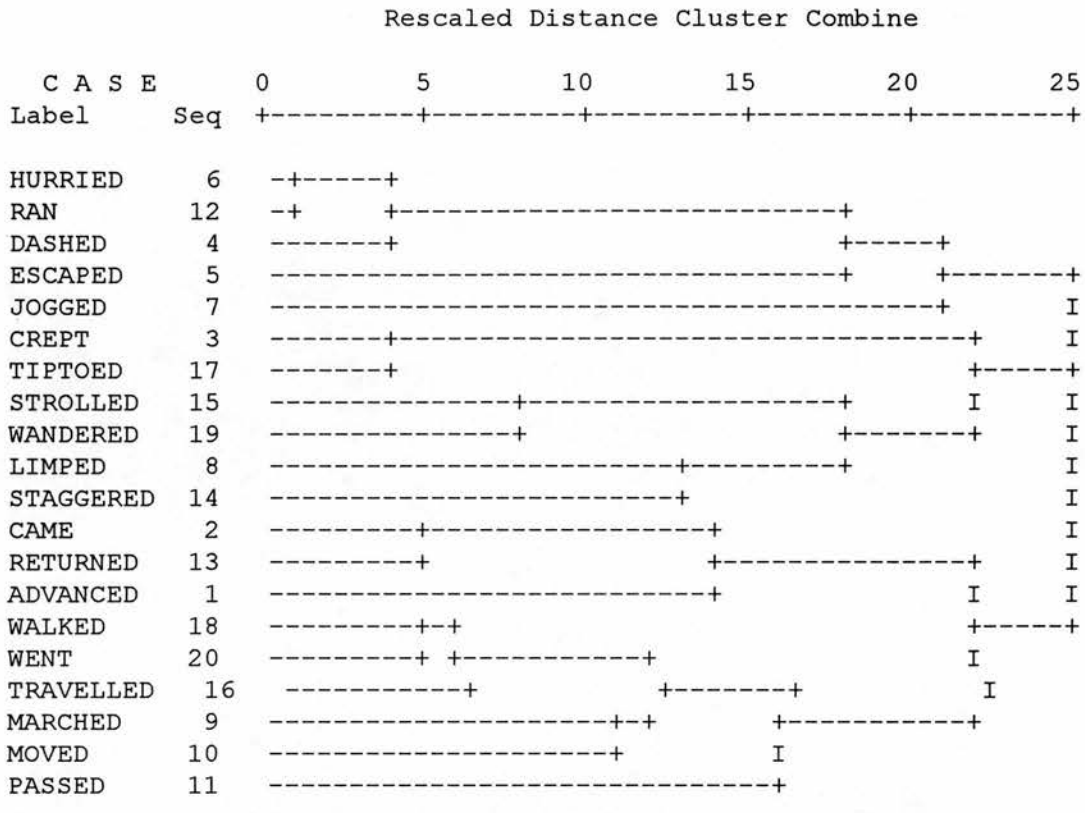

Figure 7.4: Dendrogram for Nandi speaker group using Average Linkage

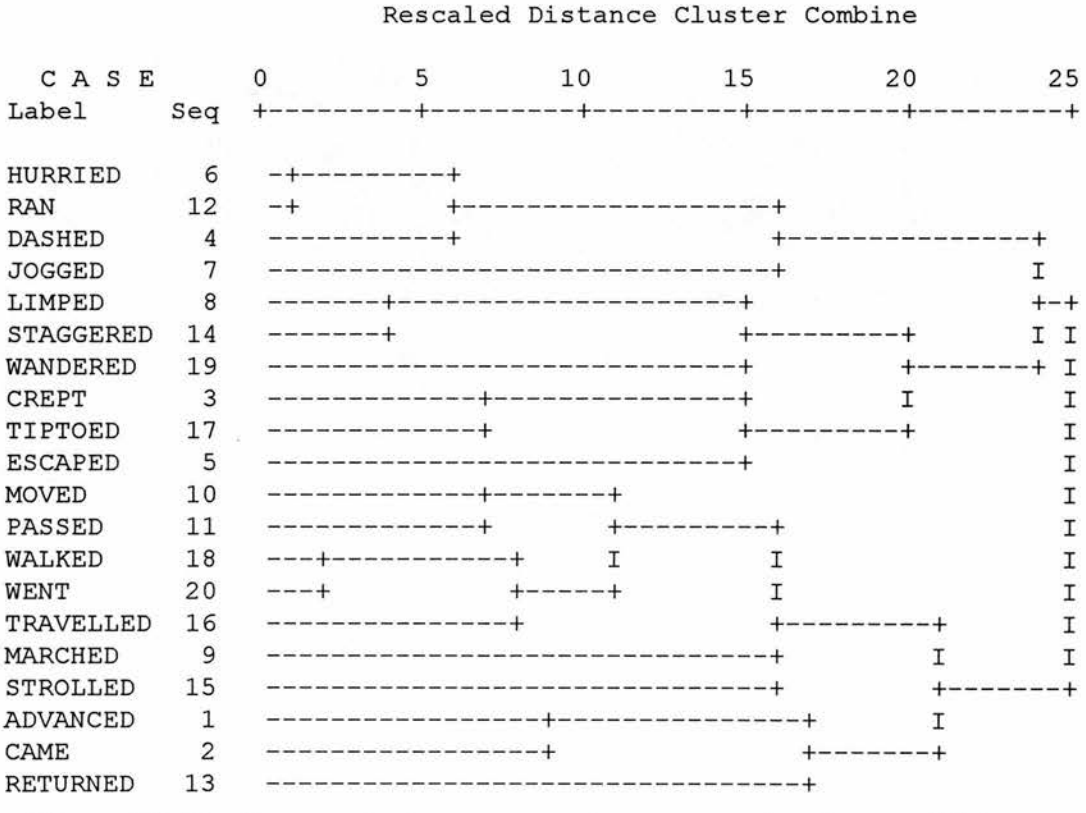

Figure 7.5: Dendrogram for Lunyore speaker group using Average Linkage

I also ran the data on the dedicated cluster analysis package CLUSTAN and similar results were obtained. This package has a program which computes two rules for determining the number of significant clusters: the 'upper tail rule' and the 'moving average quality control rule'. Both rules generally gave a figure of three clusters as significant for all groups.

7.2.2 An alternative method of displaying the results

In 5.5.4 multidimensional scaling was described as an alternative way of displaying the results from a sorting experiment. Figures 7.6, 7.7, 7.8 and 7.9 show MDS configurations for each group of subjects.[2] It should be emphasized that this is simply a way of displaying the data obtained in this experiment. There may be a temptation to regard lexical items as floating round in some kind of semantic 'space' in a person's head, but we should remember that an external representation of what someone knows is not necessarily equivalent to the internal form of that person's knowledge (Bransford and Nitsch 1978).

7.2.3 Discussion

As suggested earlier, interpretation of cluster analysis and MDS is not a simple matter. In the absence of any real validation tests, one must be very cautious about conclusions. There is also a good deal of 'noise' in the data and there are several intervening variables. Moreover the cognitive demands of this task may not mirror those of 'ordinary' language processing, so we cannot assume that we are gaining insight into actual lexical knowledge. Nevertheless the assignment of COME and GO to separate clusters in all the learner groups seems very clear. COME forms a kind of path/direction group with RETURN and ADVANCE, while GO belongs to a more general group of motion verbs — MOVE, PASS and TRAVEL. For native speakers, COME and GO are much more closely linked; indeed, two-thirds of the sample sorted them together.[3]

There are also differences between the three Kenyan language groups which may be significant. For the two Nilotic language groups ESCAPE tends to go with DASH and HURRY (though less strongly so in the case of the Nandi) to form a group, while for the Lunyore group ESCAPE is linked to CREEP and TIPTOE.

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[2] Figure 7.8 is in fact a two-dimensional representation of a *three*-dimensional configuration, which reduces the stress value quite significantly in this case.

[3] Generally speaking, none of the configurations shows Path and Manner verbs clustering together.

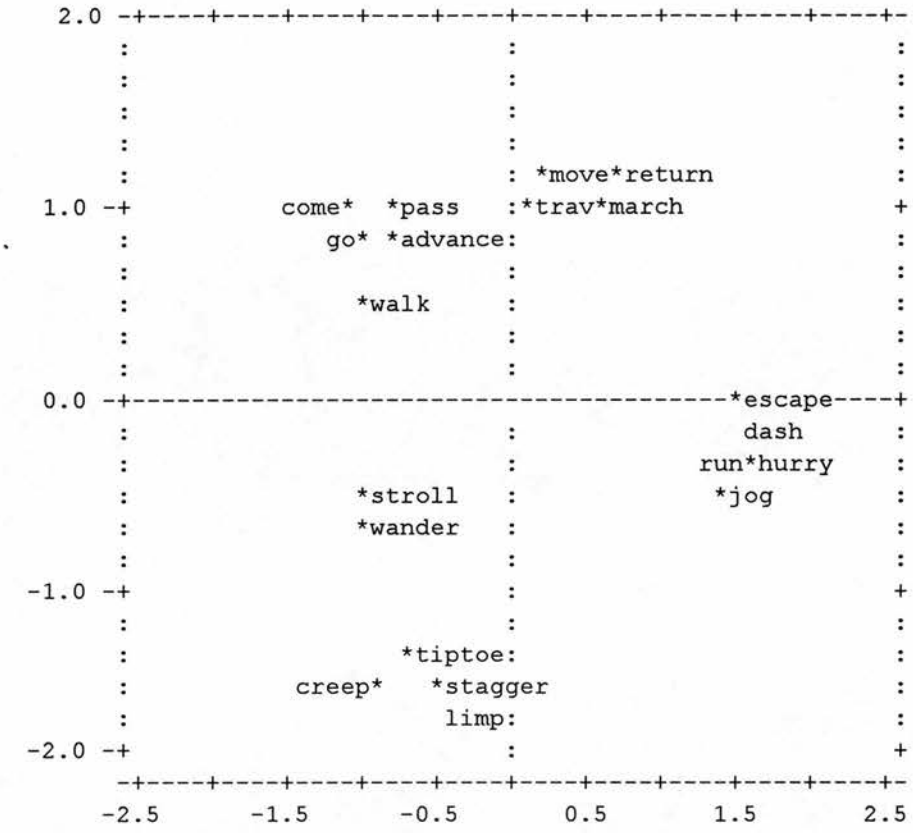

Fig. 7.6: Derived two-dimensional stimulus configuration for native speaker group

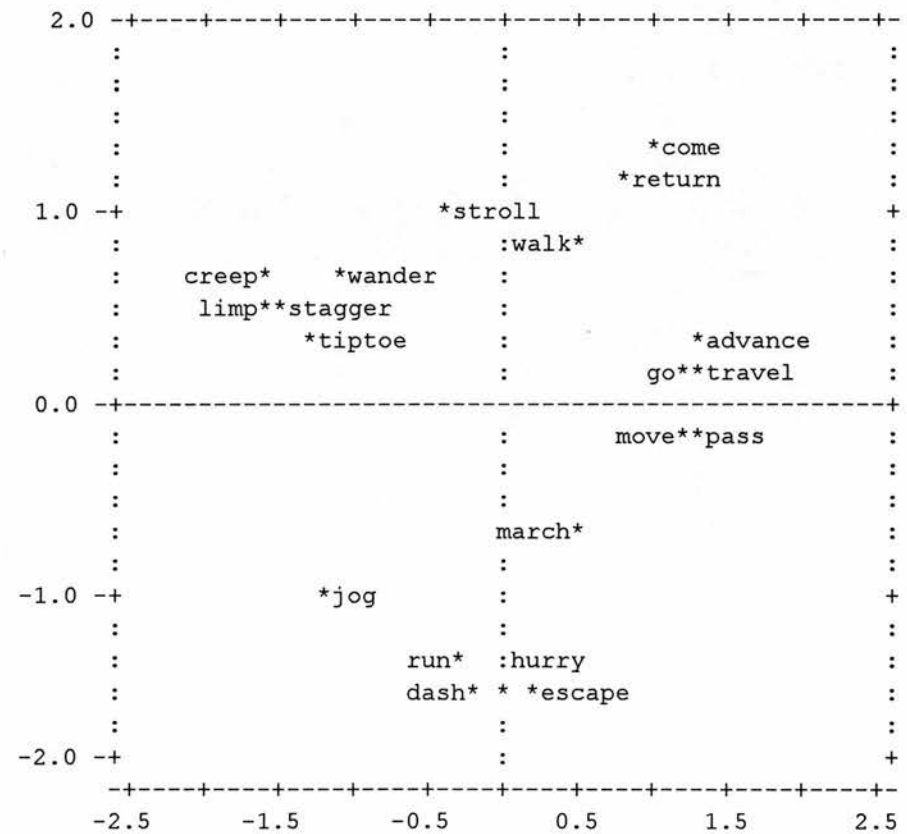

Fig. 7.7: Derived two-dimensional stimulus configuration for Luo speaker group

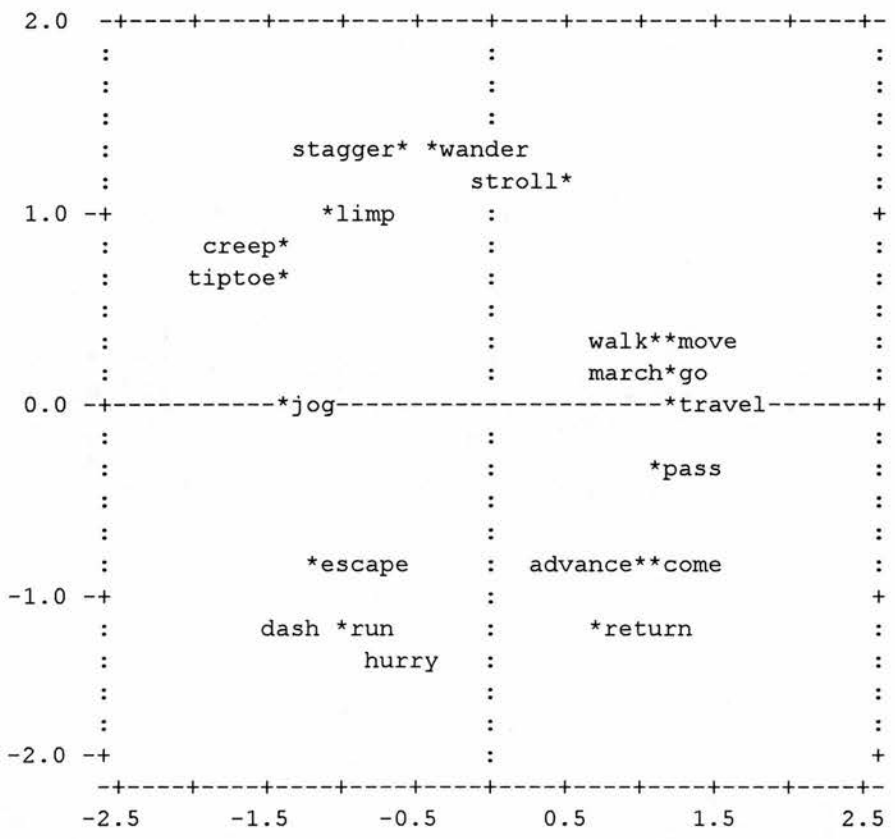

Fig. 7.8: Derived two-dimensional stimulus configuration for Nandi speakers group

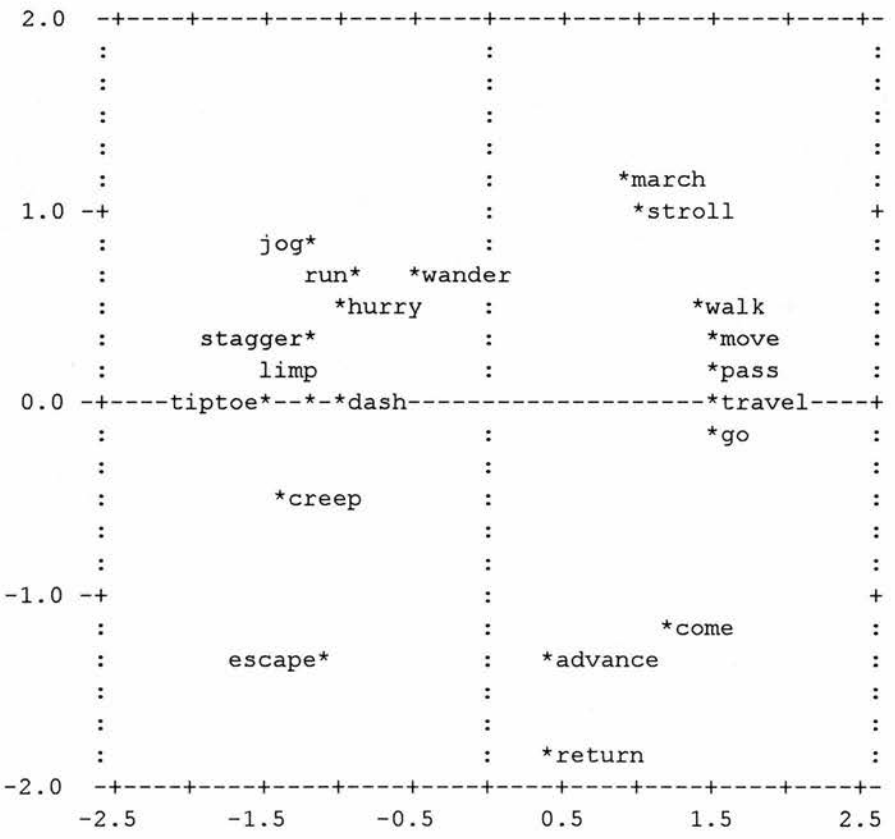

Fig. 7.9: Derived three-dimensional stimulus configuration for Lunyore speaker group

ESCAPE is something of an outlier for the native speakers, with weak links to HURRY and RETURN. The separation of LIMP and STAGGER from CREEP and TIPTOE for the Nandi speakers has already been mentioned, although it does not show up so clearly on Figure 7.8.

A closer examination of Figure 7.6 might suggest that the vertical dimension could be described as one of 'Manner' (all the Path verbs are in the top half) and the horizontal dimension as one of 'Speed', with RUN and STROLL at the two extremes (though COME and GO should perhaps be nearer the middle than they actually are). The dimension assignments of the other groups are more difficult to determine.

It is obvious that further investigation, using larger samples and a wider variety of techniques, would be needed to test the generalizability of these observations, together with a more profound study of the inadequately documented lexicons of the Kenyan languages. However the results are at least not inconsistent with the hypothesis that learners' IL lexical categories are influenced by those of their mother tongue.

7.3 Summary

Analysis of the lexical reception data has revealed clear differences between the experimental groups: an overall difference between native and non-native speakers and differences among the three Kenyan groups. Twelve items on the sentence-judging task showed varying levels of acceptability which may be due to the influence of corresponding mother-tongue forms. The sorting task showed that learners with different L1s do group L2 items in different ways. However, in both tasks there were large areas of virtual agreement between all the language groups, as well as marked individual differences within the groups, which was also the case in the production tasks.

CHAPTER EIGHT

INTERPRETING THE RESULTS

In this final chapter the results presented in the previous two chapters will first be discussed in relation to the study hypotheses. In the second section an attempt will be made to relate them to the cognitive linguistic framework put forward in earlier chapters. Finally, conclusions will be drawn and possible pedagogical implications considered as well as suggestions for future research.

8.1 Testing the hypotheses

The four hypotheses, which were presented in 5.1 above, with their sub-hypotheses and both null and alternative forms, are reviewed here in turn.

8.1.1 Lexicalization patterns: the first hypothesis

This hypothesis was concerned with learners' preferences for locomotion lexicalization patterns, as shown by the use of motion verb types (i.e. Path or Manner). The null forms of the sub-hypotheses are:

H_0 1a L2 learners with different L1s show no significant preference for particular motion verb types in their L2 lexical production.

H_0 1b L2 learners at different proficiency levels show no significant preference for particular motion verb types in their lexical production.

In the Story Retelling task (Task A), all the Kenyan learner groups made substantially more use of Path verbs and less of Manner verbs of locomotion compared to the native speaker groups tested. This was true whether they had just heard the story in their own language (the first retelling) or in English (the second retelling). A higher rate of Manner verb use was evident in the teacher trainee (Advanced) groups, giving a significant Education effect. Both null hypothesis 1a and 1b can therefore be rejected.

Furthermore, since the locomotion lexicalization patterns of the three Kenyan languages give priority to Path verbs, in contrast to the Manner verb – Path 'satellite' preference of English, there is some support for the alternative sub-hypotheses:

H_1 1a L2 learners show a preference for L2 motion verb types in accordance with their characteristic L1 lexicalization pattern.

H_1 1b L2 learners at higher levels of proficiency show more preference for motion verb types that fit the characteristic L2 lexicalization pattern.

However, there was also a significant Story Language effect: all Kenyan groups made more use of Manner verbs on the second retelling, with an overall mean increase of 12.16% (though the group mean increases ranged from 2.44% for NAS to 33.83% for YRT). It might be thought that this was because the English version of the story, listened to before the second retelling, contained a high proportion of Manner verbs (80%). However, the Manner verbs used by the Kenyan subjects were frequently not the same as those in the English version. For example, in the third frame of the story, the English version has *Juma strode off briskly*, but only one in each of the language groups actually used this verb. It is true that 7 subjects (mostly in the Nandi and Lunyore groups) used STROLL, presumably because they misheard, or were not familiar with, the past tense of STRIDE (at the same time showing inadequate knowledge of the meaning of STROLL, which is not appropriate in this context, as the picture makes clear). Nevertheless, the most common Manner verb used in this frame on the second retelling was WALK (46 subjects). In another frame (18), where the English version used the fairly common Manner verb CRAWL (which was extensively used by Kenyan subjects in the *first* retelling), there was substantial use of other Manner verbs such as CLIMB, WALK, and CREEP as well as CRAWL.

Another explanation for the Manner verb increase on the second retelling might be that the subjects' greater familiarity with the narrative after hearing it again encouraged them to use verbs they might not have thought of on the first retelling. This would be difficult to prove; indeed there is little evidence from the transcripts that subjects were more adventurous in their lexical choices in the second retelling; the main benefit from hearing the story again would seem to have been greater ease in recalling the events — there were fewer hesitations and omissions.

Among the Kenyan language groups on the Story Retelling task, there was a significantly higher use of Manner verbs by the Luo speakers. However, this finding was not supported by data from the Sentence Completion task (Task B), where the equivalent ANOVA showed an interaction between First Language and Education due to the *lower* use of Manner verbs by the Luo Advanced group. Although the interaction disappears when one of the sentences (no. 12)

is removed from the analysis, it was the Lunyore speakers who showed the highest use of Manner verbs on this task.

It seems reasonable to suppose that this difference in the results from the two tasks reflects their different language functions. Task A was a fairly spontaneous oral task, with little opportunity for subjects to ponder over alternative lexical items while they struggled — often quite visibly — to frame their own sentences. As a written exercise, Task B allowed subjects more time in which to make their choice of single lexical items but this was constrained by the syntactic context into which the item had to be fitted. Thus the difference in Manner verb use is one of the kinds of interlanguage variation described by Tarone (1988), who refers to her own research showing complex patterns of 'style shifting' in grammatical usage over three different tasks.[1]

A breakdown of Task A data by Path type showed that the overall pattern of results was not evenly maintained. There was a clear Story Language effect on all the four types analysed, except for Type IV, where there was an interaction between First Language and Story Language. The main increase in Manner verb use occurred on Type III frames — the intermediate point type (VIA). In the case of Type II (TO), the significant change was actually a decrease, although the number of Manner verbs used on either retelling was quite low; this low proportion was a feature of the English text and was closely paralleled in the performance of the native speaker groups.

The higher use of Manner verbs by the Advanced Kenyan groups was evident in Types I and III but was only significant on Type III.

The greater use of Manner verbs by the Luo speaker groups could be seen in all types except III (where there was less than 1% difference between the three languages) but only reached the level of significance on Type I.

In the absence of any studies of the distribution of Path Types in English use (cf. the analysis of the COBUILD examples in Chapter Three), it is not possible to draw any conclusions from this post-hoc analysis.

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[1] It is also possible that the somewhat more sophisticated educational background of one of the school groups may have led to more differences on a *written* elicitation task, whereas the oral elicitation of Task A did not produce any significant difference; indeed on the second retelling of the story the Manner verb means of the two Luo sub-groups were almost identical.

8.1.2 Particular lexical items: the second hypothesis

In this hypothesis, it was the use of individual locomotion verbs that was the issue. The null sub-hypotheses are:

H_0 2a L2 learners with different L1s show no significant differences in the amount of use they make of individual locomotion verbs.

H_0 2b L2 learners at different levels of proficiency show no significant differences in the amount of use they make of individual locomotion verbs.

Analysis of data from the Sentence Completion task (Task B) produced significant chi square results on many items. As explained in Chapter 6, of the 16 motion items available for analysis, one (no.11) had to be excluded because the large number of different items used did not permit meaningful grouping.

Chi square tests were significant on 11 of these items (73.3%) for a comparison of native speaker and Kenyan totals; these items were well distributed over all the Path types. This gives good grounds for rejecting the null hypothesis 2a. The comparison of education levels totals was significant on 9 items (60%), mostly of Types IV and V. The rejection of null hypothesis 2b is therefore slightly less well-based.

Comparisons between the Kenyan language totals yielded significant chi square results on 8 items (53.3%), with at least one of each type. These significant differences are worth discussing in more detail as they do suggest possible first language influence and give some weight to the alternative sub-hypothesis:

H_1 2a L2 learners show preferences for individual L2 locomotion verbs which can be related to 'equivalent' L1 items.

In sentence 4 (*The policeman had to _____ right under the lorry in order to rescue the injured man*), Luo speakers showed a decided preference for GO (and other Path verbs) rather than CRAWL (and other Manner verbs): this was in significant contrast with the behaviour of the Nandi speakers. The reason may be that in this particular example of a Path Type IV sentence, Luo is more likely to use an equivalent of GO (*DHI*), whereas Nandi would use an equivalent of CRAWL (*KUIKUIYOT*).

In sentence 10 (*The children _____ for more than an hour without seeing any villages*), where WALK was the majority choice in all groups, the

Nandi speakers made significantly more use of GO and TRAVEL than did the Lunyore speakers. Furthermore, in sentence 6 (*In the old days it was quite common for people to _____ from here to* [a nearby town] *and back in a day*), where WALK was also the majority choice in all groups, we saw that, if we add the use of FOOT as a verb to that of WALK, the Lunyore speakers did make significantly more use of these than either the Luo or Nandi speakers. The lower use of WALK by Nandi speakers in these two sentences is not surprising in view of the Task A data showing that in the story retelling they used GO much more frequently than WALK. But the Task A data also implies that Luo rather than Lunyore speakers would show more use of WALK. The solution may lie in the contexts of the two sentences. While the Luo verb *WUOTH* and the Lunyore verb *CHENDA* both express a general sense of motion as well as the act of walking, it is the simple Luo verb of motion *DHI* which would probably be used here.

In sentence 5, (*Although he wasn't really running, he was certainly _____*), where WALK was not the majority choice, it was nevertheless chosen by a significantly large number of Lunyore Intermediate subjects; JOG was more common in the Advanced group. However, the Luo speakers, who did not make more use of JOG in this sentence, made more use of the verb in sentence 20, (*That man isn't running very fast, he's just _____ along*), in significant contrast to the Nandi speakers' use of WALK. Luo has a verb *YONG'O* which is roughly the equivalent of JOG; as was noted in Chapter 4, Nandi and Lunyore do not appear to possess equivalents and circumlocutions have to be used. It is also worth noting that the Advanced speakers generally made more use of JOG than the Intermediate speakers; this is an item which is less likely to be in the intermediate learner's lexicon.

In the two sentences which involved passing over an intermediate ground object, clear differences were seen:

> *(1) Because of the heavy rain, the children were unable to _____ over the stream to get to school.*
>
> *(8) The boys had to _____ over the railway line in order to get to John's house.*

While the Lunyore speakers were almost equally divided between CROSS and JUMP in sentence 1, the Nandi speakers had a strong preference for CROSS (also shown by the Luo Advanced group). As for sentence 8, although CROSS was the most popular choice in each language group, there was a significant proportion

of Lunyore speakers (29%) who chose JUMP . We saw in Chapter 4 that Lunyore has two verbs, *AMBUKHA* and *RUUMA*, more or less corresponding to CROSS and JUMP , while Nandi only has *SIR.* It may be that having the two verbs in their own language gives Lunyore speakers greater freedom in choosing either CROSS or JUMP , while Nandi speakers tend to stick more to one (CROSS). However, in sentence 3 (*It is dangerous to try to _____ from a moving vehicle*) the Nandi subjects strongly followed the popular choice of JUMP.

The Task A data also showed significant differences between the three language groups in the use of COME, REACH and RUN. The Luo group made more use of COME and RUN, than the others, while the Lunyore group made more use of REACH. I can offer no satisfactory explanation for the Luo behaviour, but the Lunyore equivalent of REACH (*OLA*) seems to be a very common verb, being used six times in the narrative, compared to twice for the English.

8.1.3 Semantic acceptability: the third hypothesis

The semantic acceptability for different language groups of individual locomotion verbs in context was tested in Task C. The null hypothesis was:

H_0 3 There is no significant difference in the way L2 learners with different L1s judge the semantic acceptability of L2 locomotion verbs in context.

There was a clear Language effect on two sets of items (12 in all); the only significant contrast was between native speakers and Kenyans as a whole. The null hypothesis can therefore be rejected. Substantial differences between Kenyan groups were also observed on individual items: larger samples would be needed to show whether these were significant. However, the differences do give some support to the alternative hypothesis:

H_1 3 L2 learners judge the semantic acceptability of L2 locomotion verbs in context according to their L1 norms.

Luo speakers had an acceptance rate of less than 40% for item 18 (*He walked the streets from morning till night looking for work*), which may be because the transitive use of WALK fits its Luo (as well as Nandi) equivalent even less well than it does the Lunyore. They also had a fairly low acceptance rate (40%) for item 28 (*We reached the shore and descended from the boat*), despite being lakeside dwellers, who might be expected to have more familiarity with the item's context. The Luos were the only group to show

evenly divided opinion about item 15 (*He climbed down the broken ladder very carefully*), perhaps reflecting the fact that Luo has two directionally determined verbs for climbing.

On the other hand, the Luo speakers showed a high rate of acceptance (80%) for item 7 (*The injured man was unable to go and had to be taken in a wheelchair*). They seem to have read GO in a specifically ambulatory sense, which the use of *WUOTH* in this sentence, with its double sense of general motion and walking, would seem to encourage. Perhaps for the same reason they also had the highest rate of acceptance (92%) for item 12 (*We all decided to walk there on foot*). However, it is difficult to see why over half the Luo (and Lunyore) speakers accepted item 19 (*If you pass that road a little way, you'll soon see his home*), with its anomalous use of PASS, although the equivalent verb in Luo (*KALO*) does have a wider range of use than PASS (as does, to a lesser extent, the Lunyore equivalent *BIRA* — see Figure 4.5 in Chapter Four).

Nandi speakers had a particularly low rate of acceptance (25%) for item 6 (*He circled the house twice before he went in*). The generally low Kenyan acceptance for this item could be the result of lack of familiarity with CIRCLE as a verb; however, unlike Luo and Lunyore, Nandi does not appear to have a single verb which could easily be used to translate the sentence. The Nandi group was especially divided about item 23 (*He passed the church but did not go in*); this may be due to the fact that they have two verbs (*SIR* and *BUN*) that cover different aspects of PASS (again see Figure 4.5 in Chapter Four).

A high proportion of Lunyore speakers found item 14 acceptable (*My friend needed a change, so he went for a walk in Uganda*). This may be because the equivalent verb in Lunyore —*CHENDA*— also has the sense of visiting. The use of *loitered* with *past* in item 25 (*They loitered past the house all day*) also proved particularly acceptable to the Lunyore group, although the equivalent mother tongue verb *BOTOKHANA* has a primary sense of 'movement around' which might not seem to fit the preposition *past*.

8.1.4 Lexical sorting: the fourth hypothesis

This hypothesis took these null and alternative forms:

H_0 4 L2 learners with different L1s sort L2 locomotion verbs in similar ways.

H_1 4 L2 learners sort L2 locomotion verbs in accordance with L1 semantic constraints.

But as the discussion of this hypothesis in Chapter 5 made clear, no statistical grounds for rejecting the null hypothesis can be attached to the results from the Card Sorting task (Task D). However, it is possible to say that they are not inconsistent with the alternative hypothesis that learners' IL categories are influenced by those of their mother tongue.

One of the clearest features of the Kenyan language groups' MDS configurations obtained from the sorting data (Figures 7.6–7.9) was the separation of COME and GO in different clusters, unlike the native speaker configuration where the two verbs are very close. Although each of the Kenyan languages has a pair of motion verbs in deictic contrast (*DHI* and *BIRO* for Luo, *WIY* and *NYO* for Nandi, *TSIA* and *ITSA* for Lunyore), they do not seem to be used together to the extent that they are in English where, as the OED (s.v. *come*, v. V) says, with citations from the 14th century onwards, '*Come* is often used in association with *go*, to contrast or to include the two motions or results.'[2]

If we look back at the diagram of associative links in Chapter Three (Fig. 3.5), we find remarkable similarities with the native speaker configuration. In the diagram GO has direct links with COME, MOVE, TRAVEL and WALK, but is only linked with RUN through WALK; CREEP has no transitive links with any of these.

In all the groups' configuration there is generally a separation between Path and Manner verbs, suggesting that this distinction is a cognitively valid one. The exceptions are WALK, MARCH and ESCAPE (the last being a marginal Path verb). The clustering of WALK with GO and other Path verbs in the Nandi and Lunyore groups is not surprising in view of the semantic range of *WIY* and *CHENDA*. It is more difficult to explain why MARCH is close to MOVE and TRAVEL for both native speakers and Nandi groups.

Other possibly significant differences between the Kenyan language groups are also not easy to explain, such as the separation in the Nandi speakers configuration of LIMP and STAGGER from CREEP and TIPTOE. When we look at the verb ESCAPE, we find that it was generally sorted by the Luo and, to a lesser

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[2] *Come and go* is used in verbal, nominal and adjectival expressions. *Comings and goings* is a common expression to denote the movements of people at a particular place. The pair also figure in several proverbs and sayings like 'Easy come, easy go' and what has been described as 'the sluggard's daily prayer': 'Come day, go day, God send Sunday'.

extent, the Nandi speakers with DASH, HURRY and RUN, suggesting a kind of 'rapid movement' group. For the Lunyore speakers, on the other hand, the association was more with CREEP and TIPTOE, which gives the idea of a 'secretive movement' group. Although the Lunyore verb normally used to translate ESCAPE in the sense in which it was used in the sentence on the card (*Juma escaped along the path)—ILUKHA*—has a primary meaning of running away, the trigger for the association with CREEP and TIPTOE may well have been the verb *EBISA*, which can mean escape in the sense of hiding away.

8.1.5 Summary

We may conclude that the mother tongue *does* appear to influence second language locomotion verb use (both receptive and productive) in quite subtle ways — lexicalization patterns, frequencies of particular verbs, the understanding and acceptance of certain verbs. This influence may vary according to the nature of the task and between individuals; it also tends to decline with greater proficiency. Another factor, which will be dealt with more fully in the next section, is the established local variety of the second language, which is likely to reinforce certain features.

8.2 The results in context

This work has been presented as a cross-linguistic study of lexico-semantic interaction in learners whose first languages are not closely related to each other and not related at all to the target language—English. On the theoretical linguistics side, the chosen lexical field of locomotion has been interpreted within a framework of cognitive semantics. On the applied linguistics side, the learners have been situated in the context of a particular second language learning environment. We shall take each of these aspects in turn.

It would certainly appear that locomotion is a lexical domain that can be investigated as a relatively self-contained unit. While the metaphorical extensions of such items as RUN, PASS and COME take us well beyond the frontiers of physical locomotion, the importance of the primary field of movement means that it is relatively easy to study cross-culturally as well as cross-linguistically. The universality of the experience, both in physical and cognitive terms, ensures that there will be many similarities in its linguistic expression between languages. Thus the various story retellings collected in Task A were all recognizably narratives of a boy's journey to school; a more

specific example of wide agreement was the near consensus among both native speakers and learners that at one point (Frame 17) the boy 'slipped' and 'fell'.

It is also clear that a Cognitive Semantic approach is particularly valuable in understanding the lexicalization of locomotion. It will be recalled that our first guiding assumption (see Introduction) was that language learning is a cognitive process which cannot be divorced from other cognitive processes. Reviewing the semantic foundations of motion events in spatial relations was an essential prelude to the discussion of Talmy's analysis of the SOURCE-PATH-GOAL schema underlying locomotion; it was his typology of lexicalization patterns which provided the analytic model for this investigation. He makes a cognitively based distinction between Path and Manner verbs of locomotion, seen as prototype categories with fuzzy edges.

From the applied linguistics point of view, this has been a study of second language learning (The term SLA, as currently used, can be unduly restrictive). Our second guiding assumption was that first and second language learning are not *fundamentally* different from each other. We shall now try to explain this in more precise terms.

Consider a child learning his first language. There is good evidence to suggest that such a learner is cognitively biased towards certain conceptualizations of entities rather than others which are equally plausible in strictly logical terms (see for example the contributions to Wanner and Gleitman 1982). There are, it would seem, certain universal cognitive principles at work. Thus basic-level categories tend to emerge earlier and superordinate categories later. In learning his L1 the child has to restrain the natural processes of category extension in order to channel them according to adult norms (Taylor 1989: 255).

The dialectic of convention and motivation seen here in first language learning is paralleled in second language learning. The L2 learner is involved in recategorization in all areas of language—phonology, morphology, syntax as well as the lexicon—with the aim of approximating to L2 norms. In his case, though, there are additional factors to be considered.

We may obtain a better understanding of how all these factors operate together by considering Figure 8.1, which shows the possible types of 'interlanguage' usage in the data from this research. I am using 'interlanguage' here simply to refer to those aspects of a learner's L2 production *or* reception

which do not accord with 'standard' L2 norms (leaving aside the question of how these are to be defined).[3]

SOURCE	Usage	TARGET
individual	IDIOSYNCRATIC	L2 norms
universal cognitive principles	LEARNER	
L1 norms	**L1-TYPE**	
local L2 variety	LOCAL VARIETY	

Figure 8.1: Types of 'interlanguage' usage in the research data

The various types of usage are not always easy to identify in practice. This is not simply because one may not be sure about the exact source. The types are also inextricably linked with each other, so that a particular usage might be an instance of more than one type.

The problem of assignment can be illustrated from the analysis of the Task A data, which suggested that Kenyan learners of English are influenced by their native patterns and therefore make more use of Path verbs and less of Manner verbs (though this may vary with Path type). The native-like behaviour was still evident, though less strongly, at the Advanced level.

Now it might be objected that English Path verbs tend to be learned at an earlier stage and that appropriate use of the numerically greater Manner verbs depends on the widening of the learner's vocabulary. There is some evidence for this in vocabulary lists such as those of Hindmarsh (1972, 1980), mentioned in Chapter Three as having been quite influential in African educational circles. A learner's basic lexicon of locomotion is likely to include more Path than Manner verbs. In other words, what might appear to be L1 usage is in fact learner usage.

[3] It should also be pointed out that 'Source' is not being used here in the same sense that it has in the SOURCE-PATH-GOAL cognitive schema.

It was unfortunate that none of the Kenyan languages used (and possibly no Kenyan language) has the same lexicalization pattern as English, as this would have enabled the question of learner usage to be investigated in a principled way. All that one can say is that while the learner's basic lexicon may contain more Path verbs, it does also have such frequently used Manner verbs as WALK and RUN. In the context of Task A what mattered was the number of Manner verb *tokens* not *types*. Thus Table 6.2 shows that WALK accounted for 16% of the total verb tokens of the native speakers, but only 7% of the Kenyan total.

There is also the question of the greater use of Manner verbs by the Luo speakers, at least in Task A. From the evidence gathered for this research Luo certainly appears to have a larger number of Manner verbs available compared to the other two languages. As shown in Chapter Five, these are often used in serial constructions with Path verbs (a device which is also found in Lunyore and, to a lesser extent, in Nandi). Can we then regard Luo as a typical Path-conflating type of language? Talmy's lexicalization typology might seem to be an oversimplification. Indeed he himself acknowledges that some languages are better exemplars of types than others; for instance, he takes Spanish, rather than, say, French, as a particularly clear example of a language which conflates Path with Motion. This is in accordance with the general principles of cognitive semantics (cf. 2.3 above: 'examples of a category may have different degrees of salience'). On this view, we could say that Nandi and Lunyore are better exemplars of the Path/Motion type than Luo.[4]

One could also raise the possibility that the local variety of English was the source of the Kenyan subjects' preference for Path-conflated lexicalization. However, although no formal investigation was carried out, it is the researcher's subjective impression that, at least at the level of acrolect, Kenyan English tends to follow the Manner-conflation typical of Standard English.

We should not of course minimize the importance of Kenyan English as the immediate model for learners of English in Kenya, even if there is a problem of definition (see 4.1.2). It includes features which are probably due to the influence of African languages as well as some which are found in many other second language varieties of English (there is an overlap between these two types). It would not be surprising if this reinforced some aspects of L1

[4] There is a type of usage found largely in the data from Luo speakers for which I have not yet been able to find a convincing explanation. This is the use of nominalizations such as *have a rest, have a stroll, make a jump, make a corner* and *give* (someone) *a push* (meaning 'escort').

influence in the learner's lexical development, such as the preference for certain items like ESCORT.

One very common feature in the usage of all the Kenyan groups, which may well come to be regarded as typical of the emerging local variety, was the use of verbs in pairs, either in absolute form or as main verb + participle. This is probably related to the serial verb constructions referred to already, which are found in many Kenyan languages, including the ones in this study. In many cases these are combinations of Path and Manner verbs, but sometimes it is two Path or two Manner verbs. Here are some examples from the data:

jumped and passed
moved upwards and crawled
left and pushed between
hurried and went away
crawled and went back
ran and passed near
moved passing
passed walking
crawl down climbing
scrambled getting through
(tried to) *walk limping*
passed sneaking through

An example was quoted in Chapter 6 (see note 1) of OVER being used as a verb by one of the subjects, and this would seem to be a fairly clear instance of universal cognitive principles being at work. Another example of this type of usage, where the learner has extended the range of permitted particles with a verb, can be seen in *He decided to squeeze away from the crowd.*

The category of idiosyncratic usage is the hardest to identify and it may in fact be no more than the untidy end of the learner usage spectrum. It was included to allow for the possibility of universal factors being overridden by purely individual elements, which could include affective aspects like tiredness, excitement or antagonistic feelings.

As the highlighting in Figure 8.1 was meant to remind the reader, this study has been focused on L1-type usage. The results of Tasks B, C and D all suggested that learners are influenced to some degree in their use and understanding of English lexical items by their knowledge of semantically related L1 items. How is it possible for learners be influenced in this way? It is easier to understand the phenomenon if we accept the idea of a common lexicon — as in de Bot's bilingual version of Levelt's model presented in Chapter One (1.3.2)— containing items from all the languages known to the individual, with network connections which enable subsets of items to be activated. Thus L1 items could well be 'called up' when L2 items are activated, so that the L2 items would be treated as having the same potentiality and being

subject to the same constraints, syntactic as well as cultural — the contents of Levelt's 'lemma'— as the L1 items.[5]

L2 vocabulary learning can therefore be seen as not simply the acquisition of new items but the differentiation and extension of old ones, just as in L1 learning. It is probable that initially learners treat new lexical items as unique bits of language information (Ard and Gass 1987: 249), but that this changes as network connections are built up. In terms of our experimental data, the integration of old and new information can affect the choice of lexical items (Task B) as well as the judgement of semantic acceptability (Task C) and the sorting of items (Task D).

8.3 Practical implications

A study such as the present one, though based on classroom language learning, may well have no direct practical applications. Its orientation has been largely theoretical, the object being to obtain a better understanding of the lexical behaviour of learners by focusing on a limited area of vocabulary. A few points can, however, be made.

This study has provided further evidence of L1 involvement in second language use in the area of lexis and semantics. It has taken no position on whether this is something to be combated, tolerated or encouraged. Nevertheless, there is much to be said for the position adopted by Marton:

> As the process of comparison is going to take place anyway, it is better to make it conscious and channel it to profitable uses, at the same time preventing distortion resulting from uncontrolled assimilation. (Marton 1981: 150)

This may not be as easy as it sounds. Presumably one does not need to go as far as James (1980: 160ff), who advocates cultivating what he calls a learner's *interlingua*, which is a functionally reduced dialect of the target language, simplified in the direction of the L1, which is later 'naturalized'.

There does not seem to be much doubt that language teachers would benefit from having a better understanding of the linguo-cognitive basis of vocabulary knowledge. Whether it would help the learner to have specific lexicalization patterns brought directly to his attention is more debatable, but for the teacher,

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[5] We might also speculate that the selection of lexicalization pattern is made in Levelt's Formulator. If there are different Formulators for each language spoken, as de Bot proposes, it would be necessary to explain how the pattern of one language could be transferred to another, as was observed in Task A.

and even more the textbook/materials writer, a knowledge of the existence of such patterns would seem to be extremely desirable. It is after all not difficult to understand the importance in English of the pattern of Manner verb with Path particle, which is, in Talmy's terms, colloquial, frequent and pervasive in the expression of motion, ranging from physical locomotion (as studied here) to metaphorical extensions in many fields.

On a more general note, we might relate what has been said here to the well-established educational principle that knowing where a piece of information fits in is an indispensable part of understanding it. This is the theme of much American research in first language vocabulary learning at school. Teachers have been encouraged to "aim at establishing rich ties between new words and prior knowledge and [to] present new words and concepts in the context of larger domains of knowledge" (Nagy and Herman 1988: 30). In the Kenyan ESL context, the prior knowledge might well include the learner's L1-based semantic networks.

8.4 Conclusion

Vocabulary is back in fashion again after many years of neglect. But it would seem that this neglect was largely at the academic or higher professional level. For language learners, and even for many teachers, if this researcher's experience is anything to go by, lexis has always been a central concern. Nevertheless, the lack of interest in it at a higher level inevitably affected attitudes lower down, and both learners and teachers were deprived of materials and advice which could have helped them to tackle vocabulary problems. Now there is a wealth of published materials and an abundance of sometimes contradictory advice.

This study has demonstrated that the lexis of locomotion needs to be investigated more fully in different languages, especially the less well documented ones, such as most African languages. Talmy's typology may need to be refined or modified but it provides a useful framework. Furthermore, the lexical behaviour of learners should be studied in other domains using a wider range of data collection techniques. It would be particularly helpful to have detailed studies of individual second language learners, as has often been done with first language learners.

It is hoped that the present study will contribute to the ongoing discussion of how lexis works for a second language learner. We are not likely to have, in the foreseeable future, solutions to all the issues that have been raised. But as in other areas of intellectual effort the important thing is to ask the right questions.

APPENDICES

APPENDIX A

TASK A: Instructions, Story Texts and Pictures

INSTRUCTIONS (*as tape recorded*)

FIrst retelling *(English version)*

You are going to take part in a small experiment on language learning. Listen to the instructions very carefully.

The pictures in front of you illustrate a story which you are going to hear about a journey made by a student called Juma from his friend Otieno's home to school. The pictures are numbered from 1 to 24.

Please study the pictures for a few minutes before you listen to the story.

(*music for 90 seconds*)

Now you will hear the story. There will be a sound like this–(*bleep*)–every time the story moves on to the next picture.

(*story text—given below*)

Now be ready to retell in English the story you have just heard. Make sure you say something about what happens in each picture. You can take as much time as you wish.

Second retelling

You are going to hear once again the story of Juma's journey to school, but this time you will hear it in English. Listen carefully and follow the pictures as you did before.

(*story text*)

Now be ready to retell the story in English. Remember to say something about what happens in each picture.

ENGLISH TEXT

(1) Juma left Otieno's home after breakfast (2) and Otieno walked up to the main road with him. (3) Juma then strode off briskly, whistling happily as he went. (4) When he reached a signboard he jumped over the ditch at the side of the road, just as Otieno had told him, (5) and took a narrow path into the bush. (6) He soon reached the small market Otieno had mentioned. (7) Juma thought he had plenty of time, so he strolled round the shops and chatted to a few people. (8) Then he saw a crowd that had gathered round a local preacher and he wandered over to listen for a while. (9) Seeing that it was getting a bit late, he squeezed past two fat women (10) and hurried round a corner to get back on his path. (11) But he staggered back for a moment as the village madman ran past him. (12) When he came to a shallow stream further on, he waded across it (13) and scrambled up the slope on the other side. (14) He hesitated when he came to a fork in the path but in the end he followed the path to the left. (15) However, after some distance he realised his mistake and ran back to take the other path. (16) He was feeling rather tired now as he trudged through a lot of mud. (17) Unfortunately he slipped off the raised path, fell on a rock and bruised his leg. (18) Eventually he crawled back on to the path, managed to stand up (19) and then limped away from the unlucky spot. (20) He soon met his classmate John leaving his home. (21) John invited him in to have a rest and a cup of tea. (22) Afterwards, feeling much better, Juma set off for school with John. (23) As they were now very late, they sneaked round the back of the headmaster's house, which was just outside the school compound. (24) Then they raced to the school gate and were surprised to see a notice saying that the school would re-open the following week.

LUO TEXT

(1) Juma nowuok dalagi Otieno bang chiemo ma okinyi. (2) Otieno ne okowe nyaka yoo maduong. (3) Juma ne oreto ka oliyo gi mor. (4) Kaluwore gi yoo ma Otieno ne onyise Juma nene ochikore okalo bugo but kidi ma ondiki edir yoo. (5) Bange noluwo yoo madiny madonjo e bungu. (6) Kaaye to ochomo chiro matin ma Otieno ne onyise. (7) Kane pod ogalore ni en gi saa mang'eny, Juma nene obayo edir dukni kogoyo mbaka gi ji. (8) Juma nene oneno jomane ochokore kawiago jayalo makanyo obende ne odhi mowinje matin. (9) Kane ofwenyo ni odeko, ne oriyore e kind mon ariyo machwe mowuok. (10) Ne oluwo bath ot moro gi ng'wech matek mondo odogie yore. (11) Ne okwang' kodok chien matin sama ne janeko mar gweng ringo ka kalawe. (12) Bang saa machuok nene ochopo e aora ma thany thany mane oyoro. (13) Bange ne oidho thur manie bath aora ni. (14) Ne odikore ka ochopo kama yoo obarore ariyo to giko oluwo yoo mabath acham. (15) Kapok ne odhi mabor, nofwenyo ni olal kaaye to oringo kodok chien mondo okaw yoo mane oweyo. (16) Kane owinjo kool, nochako wuoth mos mos komuomo chuodho. (17) Nokier e geng yoo mogore piny eluanda, ma tiende oridhore. (18) Bange matin ne olak ka odok

eyoo, ma ochung malo. (19) Kaaye to oking'o koa kar masirano. (20) Ne oromo gi jaklasgi miluongo ni John kawuok e ode. (21) John ne onyise ni odonji mondo oywe kendo omadh chai. (22) Bange kane owinjo maber, Juma ne owuok kaachiel gi John ka gidhi skul. (23) Kaka koro ne gisedeko ahinya, ne gilidho mos ka giluoro chien mar od hedmasta manie tok skul, ka to ne gipusore e pier ot. (24) Ne giringo ka gichomo rangach mar skul kendo ne gihum nono ka gisomo baruwa ni skundno ne ibiro yawo juma mabiro.

NANDI TEXT

(1) Kingotar Juma chaikap karon eng kap Otieno kwo. (2) Kiisaiseret anyun Otieno agoi oret. (3) Yeityo kochakta Juma komorioni eng boiboiyet. (4) Kiisup oret yekii arorchi Otieno, kingoit ole mi baoyot kosir atebwet eng oret taban (5) ak kosub oret ne tendet kochut timdo. (6) Yeityo koit siret kitigin ne kigakomwochi Otieno. (7) Kingye kakosirtoe dukosiek, kobwat kole kitindoi kasarta neo, kotoi koam logoi ak bin tutigin. (8) Kingoro bik che kigeumchigei amdaindetab ga kwo anyun ibkoebchiit kitigin. (9) Kinyegeei kole machei koimeni, kobibing'daegei kwonyik aeng cheneriotin si komanda. (10) Kochakta koalok konait kwo oret kanyi. (11) Kiweklet kitigin kokasirto kibiywetab nganasanato. (12) Ne matianit koit olemi kererut ne ma loo ak kolandae beek (13) ak kosim tulwet eng bitonin. (14) Kingyeit besiob oor kobetyi ne isubi agoi kosub ne kitokchingei eutab katam. (15) Ye kiagwo kitigin koro lelutienyi ak kilabat kowek kosub oret nigai age. (16) Kigakong'et anyun nguno, kobun ngatatiat ne kio. (17) Yeityo kochaseng oret ne kitogos kobutyi koita kochur keldo. (18) Ne matianit koguiguiyot kwo oret ak komuch kotonon. (19) Yeityo kong'walat komwee achoniot. (20) Kituiye werit age nekigure Yohana ne kimi tuwai kilasit agenge eng sukul komang'u eng kotyi. (21) Kotaach Yohana konyo go nyo komuny ak koe chaik. (22) Kingye kago kaikait, komanda Juma ak Yohana koba sukul. (23) Amu kigakoimen, kosabta kosirtoe gotab konetindet neo eng sangutab ng'otwetab sukul. (24) Kirwai sukul ago kikwong'yo ye kingoro kabarastaet kole kiyatei sukul kogeny wigit neisubu.

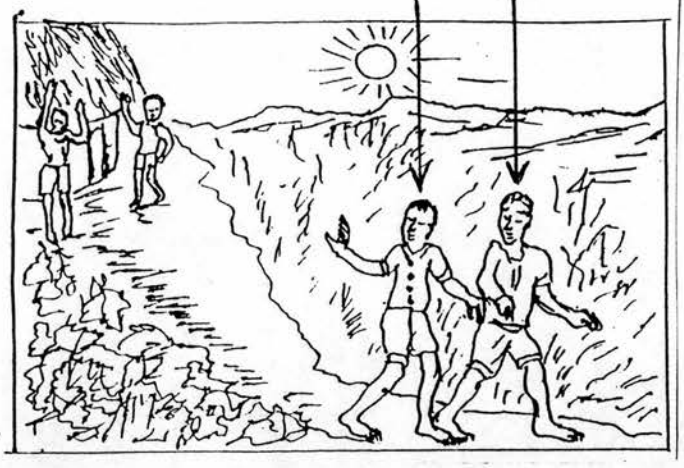
LUNYORE TEXT

(1) Juma yarula hango hango Otieno nibakhalia esiokhulia sia mukamba. (2) Otieno yamukooba okhwola khu muhaanda mukali.(3) Juma yamala narula yo bwangu nakhupaanga omulosi nasangaaye.(4) Nyiinga yoola khusikingi sio muhaanda, yaruuma okhusiila omutaro khundula we injila, butswa siinga Otieno yalina muboleeye (5) ne naloonda olung'anyi olunyel'le lutsia mubulimo. (6) Ne yoola bwangu mu akheero khati kho Otieno yali naral'le. (7) Napar'reenje ali nende ebise ebinji, Juma yebayabayia nabira mu maduka natwaka khwo nende abandu abahel'le. (8) Ma yalola omukaanda nikwebunjikhile okhufumbila omukambi womwitaala na natsia okhuhuyia khu mang'ana kaake hatu.(9) Olwa yetsul'la isi ebiraanga, yeminil'la okhubir'ra

khubakhasi babili abakhomefu (10) ne niyetsoomela okhubotokhana ekoona okhukalukha khu yaali injila yiiye. (11) Nebutswa nakalukhil'la khwo inyuma hatu olwa omulalu womwitaala yelukha okhubir'ra khuye. (12) Olwe inyuma khwo hatu, yoola khu omuchela mutitiiti okwa yoola mwo niyaambukha (13) ne niyanichila esianichisi sio luchelekha lundi. (14) Olwa yoola hetsinjila tsikabukhanaanga yesikoka hatitiiti, nebutswa olwe inyuma yaloonda injila yo mukhono mukhasi. (15) Kata mbwo inyuma we birambuukho bitsia mbwo yamanyilisia amakoso kaake nakalukha inyuma naloonda injila yayali nelekhele. (16) Bulaano yehulila nachoonyela khulwa okhwekhwesa khwayali niyakhwekhwesa mumatoyi amanji. (17) Khu ikhabi imbi yamala narelela khwichinjili liokhunjila yikhwo ne nakwa khwichina nafubukha esilenje. (18) Inyuma webise bitututu yamol'lana nakalukha khunjila, niyetinyia nasiinjila. (19) ma natitila okhurula habi hatsana hayali. (20) nebwangu yabukaana nende Yohana womukilasi wabwe narulaanga haango haabwe. (21) Yohana yamwinjisia ahulukhe khandi anywe echai. (22) Olwe inyuma, niyakhahul'la khwo-bulayi, Juma nende Yohanna nibatsia khusikuuli. (23) Ne olwa balola bachelebele benyol'la indaangu weinzu yomukhongo we lisomelo esioba wesikuuli. (24) Ma khe nibapiemana okhutsia khu silibwa sie sikuuli nebutswa balio khuchenya okhunyola amahandiko akamanyianga lisomelo liakhekulwe lihoonga lilondakhwo.

[INSERT PICTURES HERE]

1



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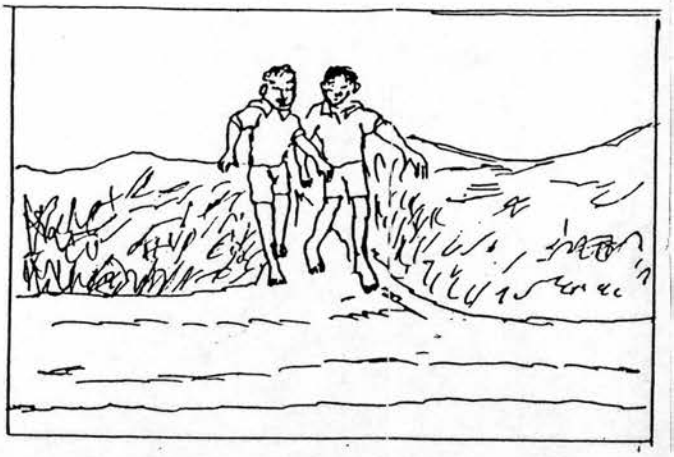

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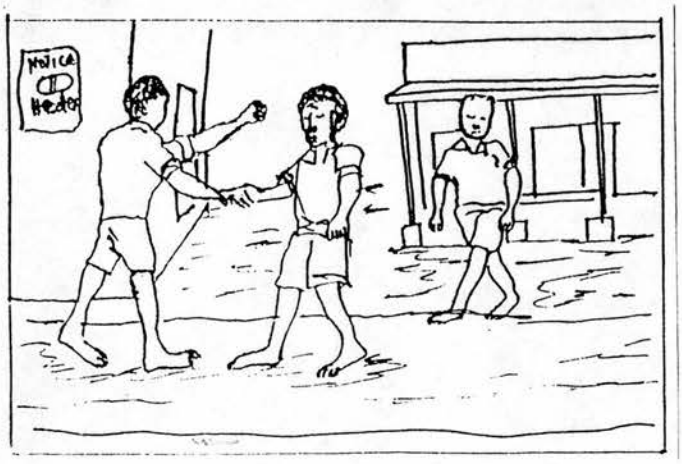

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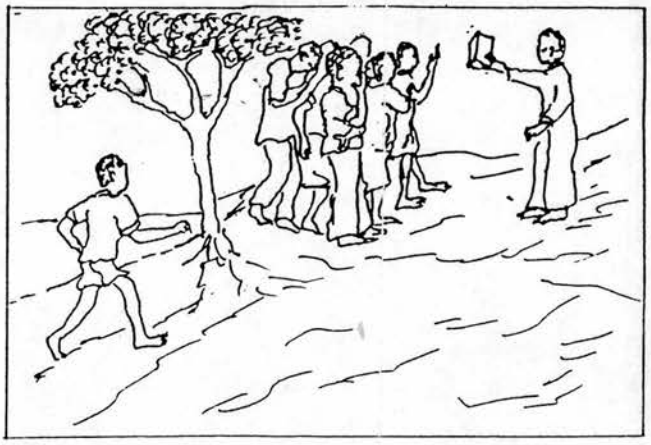

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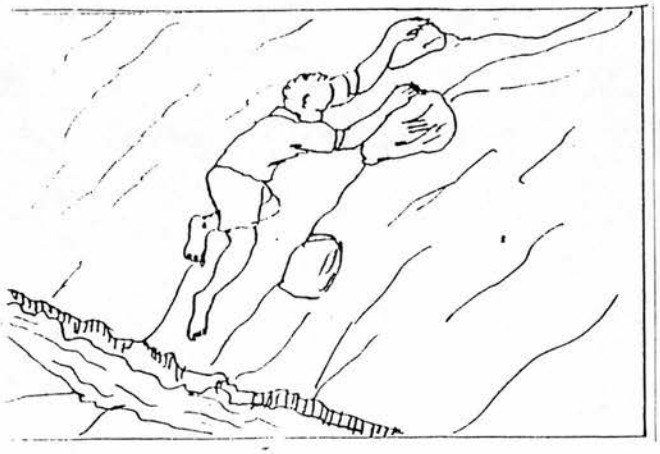

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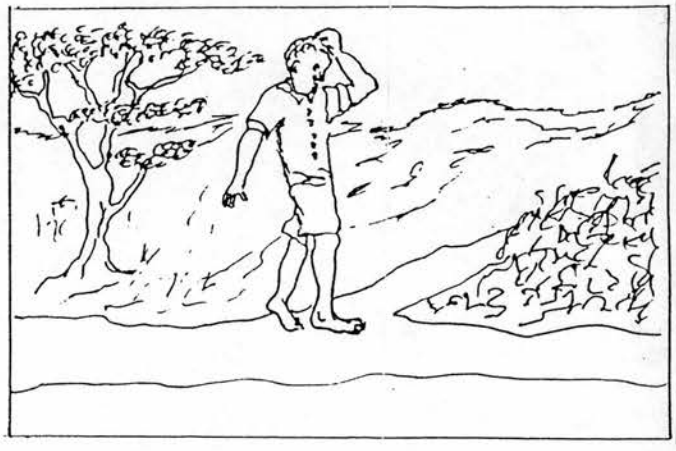

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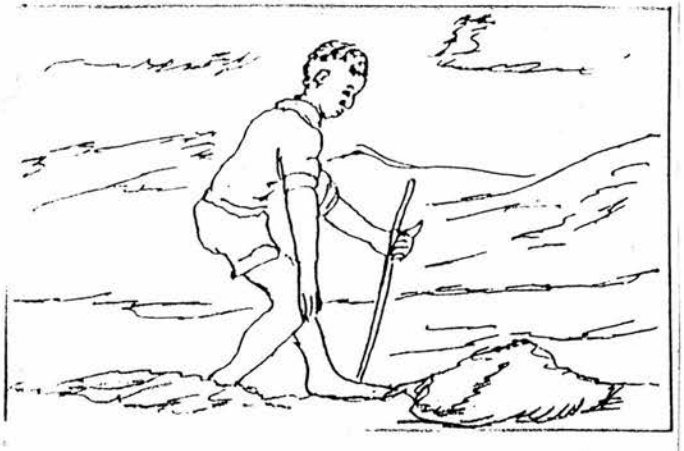

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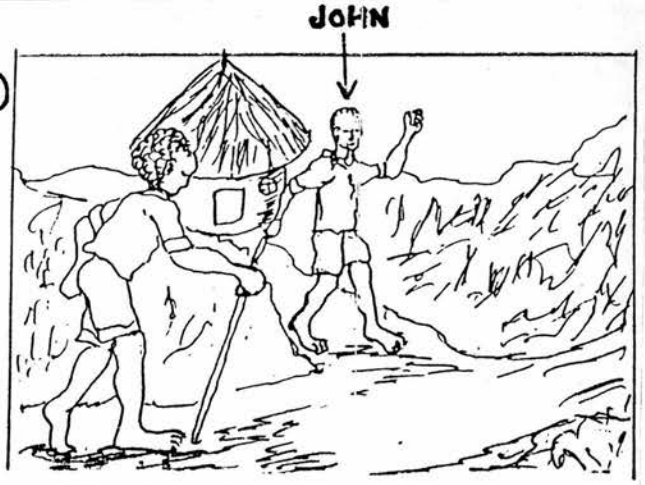

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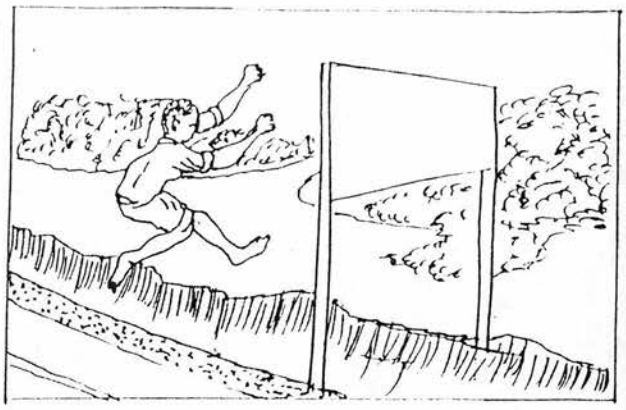

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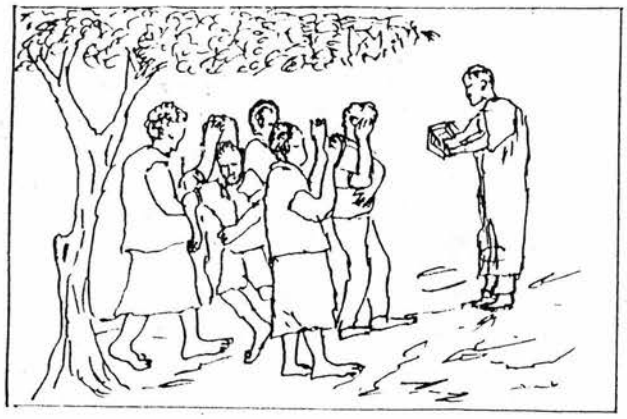

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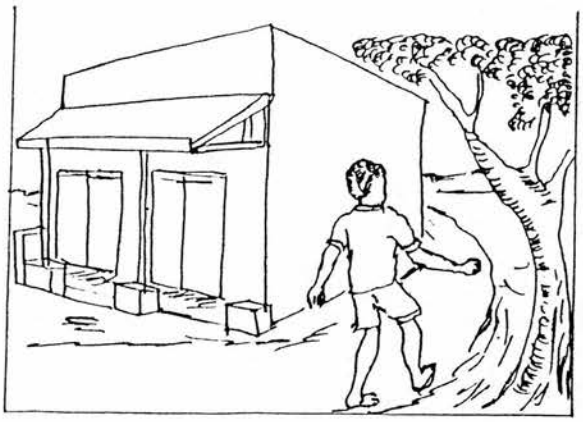

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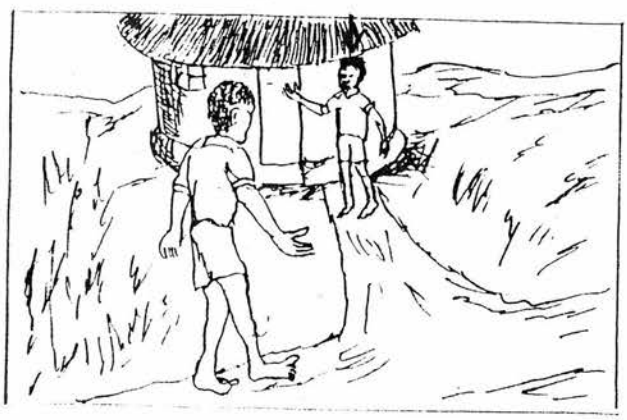

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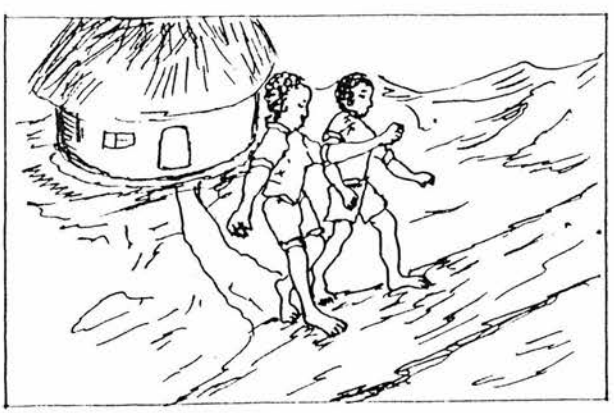

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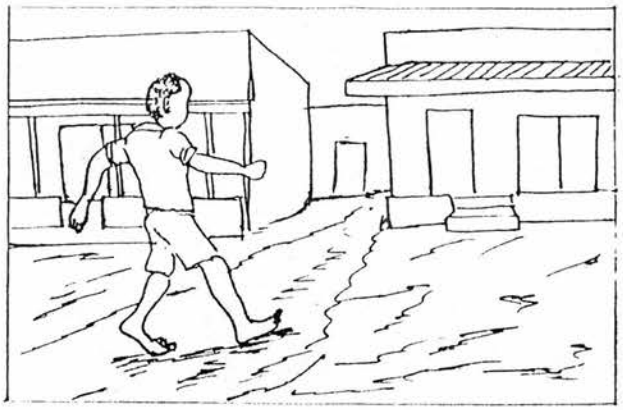

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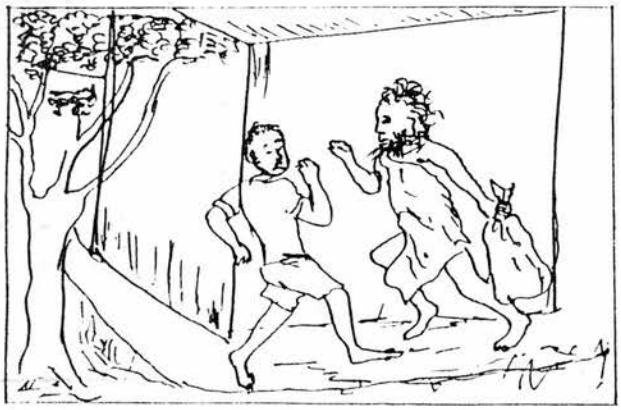

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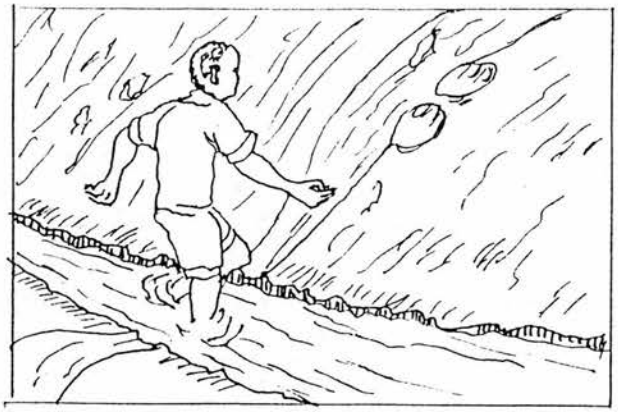

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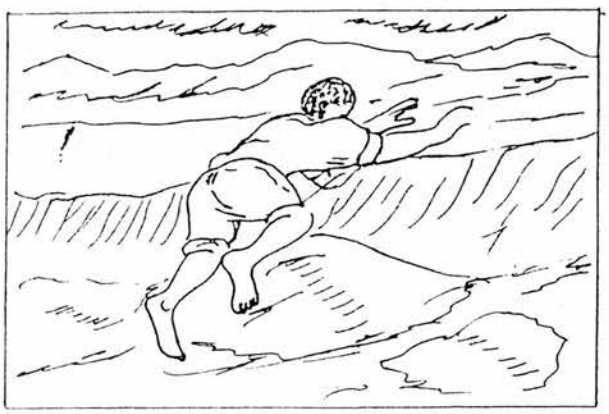

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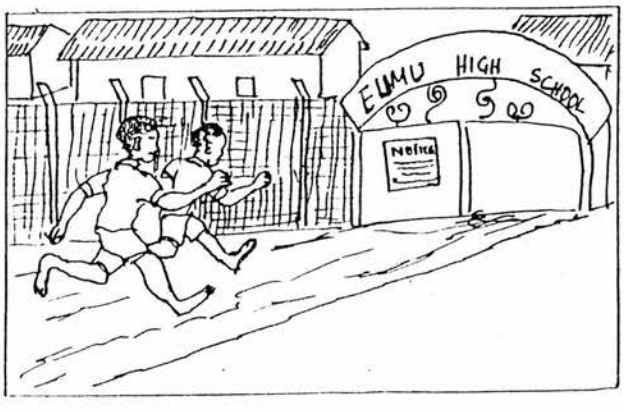


APPENDIX B

TASK B: Instructions and Text

The following sentences are incomplete. Complete each sentence by writing in the space just ONE WORD which you think is most suitable. You are allowed to use the same word more than once if necessary.

1. Because of the heavy rain, the children were unable to_____ over the stream to get to school.
2. "Does it _____ when I press this spot?" the doctor asked.
3. It is dangerous to try to _____ from a moving vehicle.
4. The policeman had to _____ right under the lorry in order to rescue the injured man.
5. Although he wasn't really running, he was certainly _____.
6. In the old days it was quite common for people to _____ from here to Kisumu and back in a day.
7. If you ever _____ this way again, don't forget to visit us.
8. The boys had to _____ over the railway line in order to get to John's house.
9. Meat _____ better when it has been roasted.
10. The children _____ for more than an hour without seeing any villages.
11. When the driver called him, the small boy _____ the car fearfully and whispered the name of the place.
12. I saw the thief _____ towards the open door while the shopkeeper was busy with a customer.
13. She told us to _____ the road for a few kilometres until we saw the lake.
14. His wife has just _____ twins.
15. The flooded path forced us to _____ back and go round the longer way to school.
16. After a hard day's work, the farmer _____ wearily home.
17. We managed to _____ on the bus just before it left for town.
18. You _____ not do this if you don't want to.

19. I _____ the visitor to the bus stop and then came back home.

20. That man isn't running very fast, he's just _____ along.

APPENDIX C

TASK C: Instructions and Text

Instructions given orally: *You will be shown 30 sentences one at a time. All are grammatically correct but there may be something wrong with the meaning of some of the sentences. While looking at each sentence you have to decide whether it is a good English sentence or not. If you think it is, put a tick against the number of the sentence on your answer paper, if not, just put a cross. Please put down your immediate first reaction to the sentence. Even if you have second thoughts about the sentence, don't change your original answer.*

1. Walking is a very good form of exercise.
2. First they crossed a field and then a small stream.
3. I climbed the bus and found a vacant seat.
4. The marathon runner travelled to the finishing line.
5. We were unable to pass to the other side of the valley.
6. He circled the house twice before he went in.
7. The injured man was unable to go and had to be taken in a wheelchair.
8. The policeman strolled quickly over and arrested the man.
9. I followed my friend as he walked behind me.
10. She was very angry and marched out of the shop.
11. The drunken man staggered into the room and collapsed on the bed.
12. We all decided to walk there on foot.
13. I crossed the road and went into the shop.
14. My friend needed a change, so he went for a walk in Uganda.
15. He climbed down the broken ladder very carefully.
16. She came back home and slept till the following day.
17. The child dashed across the road in front of the speeding car.
18. He walked the streets from morning till night looking for work.
19. If you pass that road a little way, you'll soon see his home.
20. I don't remember what time I went back here.
21. The crowd advanced back to the market.
22. I tiptoed past the sleeping baby.
23. He passed the church but did not go in.
24. The boys raced slowly towards the gate.

25. They loitered past the house all day.
26. He was going to pass them by but changed his mind and stopped.
27. Every day she has to tread the same path through the woods to school.
28. We reached the shore and descended from the boat.
29. He ran rather slowly and could not catch up with his friend.
30. They tried hard to jump under the river.

APPENDIX D

TASK A: Sample Transcriptions

Samples are included from all three language groups and at each proficiency level. Note that samples 2 and 3 give one subject's performance on both retellings. Slash marks (/) indicate the speaker's pauses.

1. Luo intermediate, 17-year-old male, 1st retelling

Otieno and Juma were friends / one day / Juma went to visit Otieno / then after / getting / their breakfast / they set off for school / Otieno / gave him a push / on the way / he was going / as he was walking along by himself / the way / Otieno showed him / he reached a place where there was a ditch / and he jumped over / then later / he took a narrow way / through a bush / towards the market / reaching the market / he met some of his friends / he greets them / later he saw where the preacher was preaching / the word of God / and he went there to join them / later when he has found that he was late / he pushed off himself from two womens / and set off / to school / he took a path which passes through / the market / and meets / a mad / the village madman / who was chasing him / later he ran and / came to a stream / which was shallow / and passed through it / after passing through the stream / he climbed the hilly path / from the stream / to the main road / to his surprise / he came to / a / he came to where / there were two roads / so he decided to take one / later he discovered that / he was on a wrong road / so as he was walking / he slided / in the mud and fall into a stream / and injured his feet / he took a stick / luckily / towards / where he was going / later he met his friend / his classmate / then welcomed him / their house / and gave him breakfast / later / they set off to school / so they knew they were late / so they hide / behind the school bushes / and then / they went running / towards the gate / later they found that / the school was to open / the week / coming

2. Luo advanced, 27-year-old male, 1st retelling

Juma started his way / one day / and / as he was going / he was escorted by his friend / they / he was escorted for some distance / and then his friend went back / then later he continued his journey / until he meet a certain / er / stream / and there there was a stone / by the / side of the way / he tried to jump / then later he continued with his way / he went until he reached / a certain / village / where he continued / from there / then as he went ahead / he reach a certain place where / where a preacher was giving / sermon / to a group of people / Juma thought / there was still time / and then he stayed / a little / to listen to what was taking place / later he realized that / time was / it was becoming too late / and therefore he made his way through / some two / fat women / then he continued / his journey / round a certain house / where / he met a / a certain madman / who / started to / chase him / Juma ran / till he reached a certain / er / stream / which was not all that big / then later he tried to wade through / / because of mud / he slipped and fell / down / later / / he made / he tried to / [?moved] crawl / and then / later he / he stood up / but he got injured at the knee / then he continued and reached / er / the home / of his schoolmate / who welcomed him / to tea / then later / after he had / er / regained his strength / they started to move to school / / because they were late / they

tried to / make / their way / through / / through the fence / and then / they went through / round / the headmaster's house / then later / from there / they started running / towards / the gate / / and there they read a notice / written / Elimu / High / School

3. Luo advanced, 27-year-old male (same as 2), 2nd retelling

the story is about Juma's journey to school / Juma left Otieno's / home / after breakfast / Otieno escorted him / to the main road / Otieno left him / Juma walked briskly / whistling / happily as he walked / on / / when he reached / a signboard / he jumped across the fence / just as / Otieno had told him / he walked on / he took up a path / going on / to the left / he reached a market / which Otieno had mentioned before / Juma thought / he had a lot of time / so he strolled around / the market for a / a while / after some time / he saw / a group of people / gathered around / a preacher / giving a sermon / Juma squeezed his / Juma decided to join them / / after realizing that it was getting late / Juma squeezed / his way / through two fat women / started walking / round a corner / to the main road / just before he went far / he stopped / as a / madman / ran / ran past him / / when he reached / a narrow / stream / Juma waded / through / / and / scraped / he / he crept / through / the / slope on the other side / then Juma continued / walking / till he reached / a certain place / which he realized he could not / pass through / so / he decided to / turn back / and follow another route / he came running / coming backwards / then / he took / another / a narrow path / leading him / to the main road / as he was now tired / Juma slep- / he slipped / over mud / and fell down / he hurt / his knees / later / he scrawled / / and stood up / and he decided to continue / his journey / then / Juma reached / his / / his classmate's home / George / then George / welcomed him / to take a rest for some time / and to / have tea / / later they continued / they started / their journey / to school / together / they realized / it was late / so / they decided to / make their way / round / the headmaster's house / which was / just outside the school compound / / when they reached the school compound / they started running / to the gate / where they read / the school / will be opened / the following / week

4. Nandi intermediate, 17-year-old female, 1st retelling

once upon a time there was a man who was called / a boy who was called / John / he lived in a village so / one day he decided to go / to visit his friend / then he was directed by Ju- / by his friend / the way / he had to follow / on his way he went and then he found / a fence / so he decided to / pass over it /then he wen- / he followed the very route / he was told by his friend / then / after a [?later] he found / he went / the market / and then he passed / between the buildings / beside it he found some shops / and he found there some friends where / he thought he was given a lot of time / then he decided to talk with them / as he continued with her journey he found another man / preaching the word of God / then he decided to join them / as he joined them the darkness fall / and / as / as the people continue understanding the word of God / he decided / he decided to pass through them / and go on his way / then he went around the way / he was told to go through / as he was going he met with / with another man who was mad / as he ran away / then he decide / as he go he found a valley / which was not so / which was not so deep / then he / he pass it and went there / at the / nearby / mountain / he crawl down climbing the mountain / because it was too / high / as he

was still walking / he went / he found two paths / then he was confused / he decided to go / to pass the left hand side / as he was going / the road was / going to be / going so much / then he decided to go [?-] / as he was walking / he found / he reach where the rock was / was knocked down and / he hurt his knee / where he was trying to crawl down / to crawl down and get another way / but / after a little time / he was / he tried to start up and continue with his way / where he try / to find a stick / to support him on the / on his journey / he walked by / and he found another man / called / another boy / his friend called Yohanna / whereby he welcomed him to his / to his cottage and / have / some tea with him / they then decided / they then decided to go to school with him / whereby they passed / their headmaster's cottage / reaching to school they found / they found the / school had postponed / till the following week / so that they could open / that's enough / the story

5. Nandi advanced, 24-year-old male, 2nd retelling

Juma started his journey to school / after taking a breakfast / with Otieno / Otieno escorted him / up to the way / Juma strolled along / along the road whistling / happily as he went / on reaching the signpost / Juma leaped across the road / and took a path that led / into the forest / shortly Juma reached / a local shopping centre / and stopped a bit / he thought he had a lot of time and so spent some minutes / chatting with his friends / / a minute later he went ahead and found a local preacher / he stopped for a while / to hear the sermon / seeing that the time was up / he squeezed through two fat women / and continued his journey / he went round a corner and had to / hide a little / aside / as the village madman ran along / he continued his journey and / came / to a shallow / stream / he waded through the stream / and climbed up on the other side / / he came to a cross / a crossroad / and became undecided on which road to follow / after a deep thought / he decided to follow / a path that led to the / left / a short distance later he realized his mistake and went back / to take the right path / feeling very tired he walked [?listly] / and stumbled down / in the mud / he / he hurt / his knee / he gathered up his energy and woke up / and strolled slowly / ahead of him he came / to / his fellow / his old / friend / John / John welcomed him / into the house and gave him the rest / and a cup of tea / after which he escorted him to school / they had to creep quietly / past the headmaster's house / and passed / through the gate of the school / they became surprised / to get to see the notice that the school / will soon reopen / again / the following week

6. Lunyore intermediate, 13-year-old female, 1st retelling

first / Juma was escorted by his friend / from his friend's home / when they reached at the road the friend left him / and so Juma continued to go alone / then he reached a place where his friend had told him to jump / so he jumped / then he [?came] to a road / he followed the road which his friend had told him / he came and / and found the shops which the friend had told him / he passed and found a pastor with people praying / when he was standing there he remembered that / the time was going fast / so he left and went through the same road he had come / on his way he met a madman of the village / running into him / he ran away and he crossed a river / he started to climb [?on] the other side / and then he found two roads / he was defeated which one to follow / so he followed the one on the right / when he saw that it was not the one he came back / he followed the other one / and came to a place / then he felt that he was very tired

/ by mistake he slipped and fell down / he then tried to wake up and walk / he followed the road until he saw his friend John coming from his house / John welcomed him to the house / to his house / after he had rested John escorted him / they came to a / to the headmaster's house / behind it and they found / they found that the school gate was open / so they ran to the school gate / and they read the notice that the school was opening the next week

7. Lunyore advanced, female, 2nd retelling

I'm going to tell you a story about Juma who / who visited / who went to visit his friend / when they had just had their breakfast / Jo- / Juma was escorted by his friend to the main road / and he walked along / and reached the signpost / just as his friend had told him / he thereby / went along the / the path leading to the bush / and came across the shop / he came across a small market / and he met there many friends / he stopped to chatter with them for a while / but soon / he continued with his journey / and found a crowd / that had gathered round / a local priest / so Juma thought / Juma thought it / wise to / go and listen to the priest / but on realizing that / it was getting late / he decided / he squeezed himself / through two fat women / and / he walked along / around a corner in order to come back to / to the original path / he was travelling / but before he reached / he / the / he found an old / he found a / a madman / who / ran / beside him / when he just / when he went along / he reached a small stream / and decided to cross over it / so / he climbed on a / slopes / and he soon came to a / a place with two / paths / he didn't know / the one to take / but decided to / follow the one / on the / left side / having not gone further / he realized his mistake / and decided to / run back / to the other path / he had / left / since / it was / since it was muddy / he travelled / in the mud / and then / unfortunately / he slipped over the / high / he slipped over the / the mud / then / bruised his leg / he crawled over / to come back to the / path / he was travelling on / so he limped / until he came / he came near / his friend's home / George / who was just coming out of / his house / and welcomed him / just to have / a cup of tea / after having felt better / they decided to go / to run to school / on realizing that they were late / they decided to / to pass behind the headmaster's house / which was just / outside the school compound / on reaching the gate / they were surprised to find that / on the noticeboard it was written / that the school would be opened / the following week

APPENDIX E

TASK A: VERB DATA

The verb (and particle) data is here presented frame by frame. Each page shows data from either the single retelling for the native speaker groups or the two retellings for the Kenyan groups. A solid line across the pages of the Kenyan groups separates data from the intermediate subjects (above) and the advanced subjects (below). A dotted line separates data from the two schools providing the intermediate data for each language groups.

Verb types (i.e. Verb II types) are indicated in the last column (except for the native speakers) by the following code:

A	general verbs of motion
M	Manner verbs of motion
P	Path verbs of motion
T	temporal/aspectual verbs of motion
X	other verbs

See 6.1.2 (and note) for further details.

(1) Juma LEFT Otieno's home after breakfast

N A T I V E S P E A K E R S

MT 101	01.set off
102	01.left house
103	01.left house
104	01.?
105	01.left house
106	01.-
107	01.walking along road
108	01.set out...set off
109	01.had to walk down street
MT 201	01.set off
202	01.-
203	01.left their house
204	01.left house
205	01.leaving
206	01.left...walked down path
207	01.walking along to school
208	01.left
209	01.walked along with O
210	01.left house
211	01.left house
212	01.left O's house
213	01.left
214	01.left house
215	01.left O's home
216	01.set out from O's house
217	01.-
218	01.-
219	01.left with O, from O's house
220	01.left for school
221	01.left O's house
222	01.coming from house
223	01.-
224	01.walked down main path

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.1	1.0	START	WALK	-	-	-	M
36.1	1.0	DECIDE	LEAVE	-	-	-	P
39.1	1.0	-	SET	OFF	-	-	T
48.1	1.0	-	COME	OUT FROM	-	-	P
49.1	1.0	-	GO	WITH	-	-	A
50.1	1.0	-	WALK	-	-	-	M
52.1	1.0	-	LEAVE	-	-	-	P
55.1	1.0	-	GO	FOR WALK	-	-	A
61.1	1.0	-	LEAVE	-	-	-	P
63.1	1.0	-	GO	OUT	-	-	A
67.1	1.0	-	START	-	-	-	T
70.1	1.0	-	GO	TO	LEAVE	-	A
72.1	1.0	-	LEAVE	-	-	-	P
75.1	1.0	-	LEAVE	-	-	-	P
76.1	1.0	-	COME	OUT	-	-	P
77.1	1.0	-	LEAVE	-	-	-	P
82.1	1.0	-	LEAVE	-	-	-	P
86.1	1.0	-	WALK	OUT	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	1.0	-	LEAVE	-	-	-	P
33.2	1.0	-	ESCORT	-	-	-	P
34.2	1.0	-	START	-	GO	TO	T
35.2	1.0	-	LEAVE	-	-	-	P
36.2	1.0	-	COME	OUT	-	-	P
37.2	1.0	-	LEAVE	-	-	-	P
38.2	1.0	-	LEAVE	FOR	-	-	P
39.2	1.0	-	LEAVE	-	-	-	P
40.2	1.0	-	LEAVE	-	-	-	P
42.2	1.0	-	LEAVE	-	-	-	P
48.2	1.0	-	COME	OUT OF	GO	-	P
49.2	1.0	-	LEAVE	-	-	-	P
53.2	1.0	-	LEAVE	-	-	-	P
55.2	1.0	WANT	GO	FOR WALK	-	-	A
61.2	1.0	-	LEAVE	-	-	-	P
62.2	1.0	START	WALK	-	-	-	M
65.2	1.0	-	WALK	ALONG	-	-	M
66.2	1.0	-	WALK	FROM	-	-	M
67.2	1.0	-	LEAVE	-	-	-	P
68.2	1.0	-	SET	OFF FOR	-	-	T
69.2	1.0	-	START	-	-	-	T
71.2	1.0	-	GO	-	-	-	A
72.2	1.0	-	LEAVE	FOR	-	-	P
75.2	1.0	-	LEAVE	-	-	-	P
76.2	1.0	-	COME	OUT WITH	-	-	P
77.2	1.0	-	LEAVE	-	-	-	P
81.2	1.0	-	LEAVE	-	-	-	P
83.2	1.0	-	SET	TO	-	-	T
84.2	1.0	-	LEAVE	FOR	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	1.0	-	GO	-	-	-	A
22.1	1.0	-	START	-	-	-	T
23.1	1.0	-	GO	TO	-	-	A
25.1	1.0	-	GO	TO	-	-	A
28.1	1.0	-	SET	-	-	-	T
32.1	1.0	-	ESCORT	-	-	-	P
33.1	1.0	-	GO	-	-	-	A
34.1	1.0	-	SET	OFF	-	-	T
41.1	1.0	-	START	-	-	-	T
43.1	1.0	-	START	WITH	-	-	T
44.1	1.0	-	START	-	-	-	T
45.1	1.0	-	GO	TO	-	-	A
46.1	1.0	-	LEAVE	-	-	-	P
61.1	1.0	-	ESCORT	-	-	-	P
62.1	1.0	-	SET	TO	-	-	T
64.1	1.0	HAVE TO	GO	BACK	-	-	A
65.1	1.0	DECIDE	LEAVE	TOGETHER	-	-	P
66.1	1.0	-	GO	-	-	-	A
67.1	1.0	-	LEAVE	-	-	-	P
71.1	1.0	-	LEAVE	-	-	-	P
72.1	1.0	-	ESCORT	-	-	-	P
75.1	1.0	-	GO	AWAY WITH	-	-	A
76.1	1.0	DECIDE	ESCORT	-	-	-	P
78.1	1.0	-	ESCORT	-	-	-	P
79.1	1.0	-	ESCORT	-	-	-	P
81.1	1.0	-	ESCORT	-	-	-	P
83.1	1.0	-	START	-	-	-	T
85.1	1.0	-	LEAVE	-	-	-	P
88.1	1.0	-	ESCORT	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.2	1.0	-	GO	WITH	-	-	A
27.2	1.0	-	LEAVE	-	-	-	P
28.2	1.0	-	COME	FROM	-	-	P
29.2	1.0	-	WALK	-	-	-	M
31.2	1.0	-	LEAVE	-	-	-	P
32.2	1.0	-	ESCORT	-	-	-	P
33.2	1.0	-	LEAVE	-	-	-	P
34.2	1.0	-	LEAVE	-	-	-	P
35.2	1.0	DECIDE	GO	-	-	-	A
36.2	1.0	-	LEAVE	-	-	-	P
38.2	1.0	-	LEAVE	-	-	-	P
39.2	1.0	-	GO	-	-	-	A
41.2	1.0	-	GO	TO	-	-	A
43.2	1.0	-	START	-	-	-	T
44.2	1.0	-	COMMENCE	-	-	-	T
45.2	1.0	-	LEAVE	-	-	-	P
46.2	1.0	-	LEAVE	-	-	-	P
61.2	1.0	-	COME	OUT FROM	-	-	P
62.2	1.0	DECIDE	GO	TO	-	-	A
63.2	1.0	-	START	FROM	-	-	T
64.2	1.0	-	LEAVE	-	-	-	P
65.2	1.0	-	START	OFF	-	-	T
66.2	1.0	-	SET	OFF FROM	-	-	T
68.2	1.0	-	LEAVE	-	-	-	P
69.2	1.0	-	LEAVE	-	-	-	P
71.2	1.0	-	LEAVE	-	-	-	P
72.2	1.0	-	LEAVE	-	-	-	P
73.2	1.0	-	WALK	WITH	-	-	M
76.2	1.0	-	LEAVE	-	-	-	P
78.2	1.0	-	?	-	-	-	?
79.2	1.0	-	ESCORT	-	-	-	P
80.2	1.0	-	LEAVE	-	-	-	P
81.2	1.0	-	LEAVE	-	-	-	P
82.2	1.0	-	LEAVE	-	-	-	P
83.2	1.0	-	START	-	-	-	T
84.2	1.0	-	LEAVE	-	-	-	P
85.2	1.0	-	LEAVE	-	-	-	P
88.2	1.0	-	LEAVE	-	-	-	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.1	1.0	-	START	-	-	-	T
28.1	1.0	START	WALK	-	-	-	M
32.1	1.0	DECIDE	GO	TO	-	-	A
.....							
35.1	1.0	DECIDE	SET	OFF	GO	TO	T
41.1	1.0	-	GO	WITH	-	-	A
47.1	1.0	-	SET	OFF	-	-	T
48.1	1.0	DECIDE	GO	-	-	-	A
61.0	1.0	-	MOVE	FROM	-	-	A
65.1	1.0	-	LEAVE	-	-	-	P
66.1	1.0	-	LEAVE	-	-	-	P
69.1	1.0	-	LEAVE	-	-	-	P
70.1	1.0	-	LEAVE	-	-	-	P
71.1	1.0	-	LEAVE	-	-	-	P
72.1	1.0	-	SET	FROM	-	-	T
74.1	1.0	-	LEAVE	-	-	-	P
81.1	1.0	-	HEAD	TO	-	-	P
86.1	1.0	-	START	-	-	-	T

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
24.2	1.0	-	GO	-	-	-	A
26.2	1.0	START	WALK	AWAY FROM	-	-	M
27.2	1.0	-	LEAVE	-	-	-	P
28.2	1.0	START	WALK	-	-	-	M
30.2	1.0	-	LEAVE	-	-	-	P
33.2	1.0	-	CRAWL	SLOWLY UP	-	-	M
.....							
35.2	1.0	-	LEAVE	-	-	-	P
36.2	1.0	-	SET	OFF	-	-	T
43.2	1.0	-	LEAVE	-	-	-	P
44.2	1.0	-	SET	OFF	-	-	T
51.2	1.0	HAVE.START	GO	AT	-	-	A
61.2	1.0	HAVE TO	MOVE	AWAY	-	-	A
65.2	1.0	-	LEAVE	-	-	-	P
66.2	1.0	-	LEAVE	-	-	-	P
67.2	1.0	-	LEAVE	-	-	-	P
68.2	1.0	-	LEAVE	-	-	-	P
69.2	1.0	-	LEAVE	-	-	-	P
70.2	1.0	-	LEAVE	WITH	-	-	P
71.2	1.0	-	LEAVE	-	-	-	P
75.2	1.0	-	LEAVE	-	-	-	P
79.2	1.0	-	LEAVE	WITH	-	-	P
82.2	1.0	-	WALK	ALONG	-	-	M
87.2	1.0	-	BEGIN	-	-	-	T

(2)and Otieno WALKED UP TO the main road WITH him

N A T I V E S P E A K E R S

MT	101	02.came to
	102	02.walked him
	103	02.went to main road together
	104	02.came to bend
	105	02.-
	106	02.walked across path..came to road
	107	02.went up path
	108	02.-
	109	02.-
MT	201	02.showed the way
	202	02.showed the way
	203	02.walked along path
	204	02.walked up until main road
	205	02.went down path together
	206	02.-
	207	02.come to corner
	208	02.walked him to school
	209	02.showed him main road
	210	02.wandered down road
	211	02.took to main road
	212	02.walked along with J to main road
	213	02.walked thro' short path
	214	02.stumbled up path
	215	02.went down a sort of pathway
	216	02.came to end of road
	217	02.?came to this road
	218	02.walked to path
	219	02.walked with O to main road
	220	02.?wandered fast....split up
	221	02.left down the pathway
	222	02.walking
	223	02.decided to escort
	224	02.reached main road

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	2.0	-	ESCORT	-	-	-	P
33.1	2.0	-	ESCORT	-	-	-	P
34.1	2.0	-	ESCORT	-	-	-	P
35.1	2.0	-	ESCORT	-	-	-	P
36.1	2.0	-	WALK	WITH	-	-	M
37.1	2.0	DECIDE	ESCORT	UP TO	-	-	P
38.1	2.0	-	ESCORT	-	-	-	P
39.1	2.0	-	GIVE PUSH	ON	-	-	X
40.1	2.0	-	ESCORT	-	-	-	P
41.1	2.0	-	ESCORT	-	-	-	P
42.1	2.0	-	ESCORT	-	-	-	P
46.1	2.0	-	ESCORT	-	-	-	P
47.1	2.0	DECIDE	ESCORT	-	REACH	-	P
48.1	2.0	START	WALK	TOWARDS	ESCORT	-	M
49.1	2.0	-	PASS	-	-	-	P
50.1	2.0	-	SHOW	WAY	-	-	X
51.1	2.0	-	ESCORT	-	-	-	P
53.1	2.0	DECIDE	ESCORT	-	-	-	P
54.1	2.0	-	ESCORT	-	-	-	P
55.1	2.0	-	REACH	-	-	-	P
56.1	2.0	-	ESCORT	-	REACH	-	P
57.1	2.0	-	ESCORT	-	-	-	P
58.1	2.0	-	ESCORT	-	REACH	-	P
61.1	2.0	-	ESCORT	UP TO	-	-	P
62.1	2.0	-	GIVE PUSH	-	-	-	X
63.1	2.0	-	SHOW	-	-	-	X
64.1	2.0	-	ESCORT	-	-	-	P
66.1	2.0	-	ESCORT	-	REACH	-	P
67.1	2.0	-	ESCORT	-	-	-	P
69.1	2.0	-	WALK	WITH	REACH	-	M
71.1	2.0	-	ESCORT	-	SHOW WAY	-	P
72.1	2.0	-	ESCORT	-	-	-	P
73.1	2.0	-	ESCORT	-	LEAVE	-	P
74.1	2.0	-	ESCORT	-	-	-	P
75.1	2.0	-	WALK	-	-	-	M
76.1	2.0	DECIDE	GIVE PUSH	-	-	-	X
77.1	2.0	-	ESCORT	-	-	-	P
78.1	2.0	-	ESCORT	-	-	-	P
79.1	2.0	-	ESCORT	-	-	-	P
80.1	2.0	-	ESCORT	-	-	-	P
81.1	2.0	-	GIVE	ESCORT	-	-	X
82.1	2.0	-	ESCORT	-	-	-	P
83.1	2.0	-	ESCORT	-	-	-	P
84.1	2.0	DECIDE	ESCORT	-	-	-	P
85.1	2.0	-	ESCORT	-	-	-	P
86.1	2.0	TELL	FOLLOW	-	-	-	P

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.2	2.0	-	REACH	-	-	-	P
34.2	2.0	-	ESCORT	UP TO	-	-	P
35.2	2.0	-	ESCORT	-	-	-	P
36.2	2.0	-	TAKE	UP TO	-	-	X
37.2	2.0	-	TAKE	UP TO	-	-	X
38.2	2.0	-	WELCOME?	UP TO	-	-	X
39.2	2.0	-	WALK	WITH	-	-	M
40.2	2.0	-	ESCORT	-	-	-	P
41.2	2.0	-	ESCORT	-	-	-	P
42.2	2.0	-	ESCORT	-	-	-	P
46.2	2.0	-	ESCORT	-	-	-	P
47.2	2.0	-	ESCORT	-	-	-	P
48.2	2.0	-	ESCORT	-	-	-	P
49.2	2.0	-	ESCORT	-	-	-	P
50.2	2.0	-	ESCORT	-	-	-	P
51.2	2.0	-	ESCORT	-	-	-	P
52.2	2.0	-	ESCORT	-	-	-	P
53.2	2.0	-	ESCORT	-	-	-	P
54.2	2.0	-	ESCORT	-	-	-	P
55.2	2.0	-	REACH	-	-	-	P
56.2	2.0	-	ESCORT	-	REACH	-	P
57.2	2.0	-	ESCORT	-	-	-	P
58.2	2.0	-	ESCORT	-	REACH	-	P
61.2	2.0	-	ESCORT	UP TO	-	-	P
62.2	2.0	-	GIVE PUSH	-	-	-	X
63.2	2.0	-	ESCORT	-	SHOW	-	P
64.2	2.0	-	ESCORT	-	-	-	P
65.2	2.0	-	REACH	IN	-	-	P
66.2	2.0	-	ESCORT	-	-	-	P
67.2	2.0	-	ESCORT	UP TO	-	-	P
68.2	2.0	-	LEAD	TO	-	-	P
69.2	2.0	-	ESCORT	-	REACH	-	P
71.2	2.0	-	ESCORT	-	-	-	P
72.2	2.0	-	ESCORT	-	-	-	P
73.2	2.0	DECIDE	ESCORT	-	REACH	-	P
74.2	2.0	-	TAKE	TO	-	-	P
75.2	2.0	-	ESCORT	UP TO	-	-	P
76.2	2.0	-	GIVE PUSH	TO	-	-	X
77.2	2.0	-	GO	TOGETHER W	-	-	A
78.2	2.0	-	ESCORT	-	-	-	P
79.2	2.0	-	ESCORT	-	-	-	P
80.2	2.0	-	ESCORT	-	-	-	P
81.2	2.0	-	GIVE	ESCORT	-	-	X
82.2	2.0	START	ESCORT	-	ADVANCE	UP TO	P
83.2	2.0	-	ESCORT	UP TO	-	-	P
84.2	2.0	-	ESCORT	TO	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	2.0	-	GO	-	-	-	A
22.1	2.0	-	TAKE	-	-	-	X
23.1	2.0	-	REACH	ON	-	-	P
24.1	2.0	-	ESCORT	-	-	-	P
26.1	2.0	-	SHOW	-	-	-	X
28.1	2.0	-	ESCORT	-	-	-	P
29.1	2.0	-	ESCORT	-	-	-	P
30.1	2.0	-	ESCORT	-	-	-	P
31.1	2.0	-	ESCORT	-	-	-	P
32.1	2.0	-	WALK	-	-	-	M
33.1	2.0	-	GO	ROUND	-	-	A
34.1	2.0	-	GO	-	-	-	A
36.1	2.0	-	ESCORT	-	-	-	P
37.1	2.0	-	ESCORT	-	-	-	P
38.1	2.0	-	ESCORT	-	LEAVE	-	P
39.1	2.0	-	ESCORT	-	-	-	P
41.1	2.0	-	GO	WITH	-	-	A
42.1	2.0	-	ESCORT	-	-	-	P
43.1	2.0	-	ESCORT	-	-	-	P
44.1	2.0	-	GO	WITH	-	-	A
45.1	2.0	-	ESCORT	-	-	-	P
46.1	2.0	-	ESCORT	-	-	-	P
62.1	2.0	-	GO	WITH	-	-	A
63.1	2.0	-	ESCORT	-	-	-	P
64.1	2.0	-	ESCORT	-	-	-	P
65.1	2.0	-	ESCORT	-	-	-	P
66.1	2.0	-	ESCORT	-	-	-	P
67.1	2.0	-	ESCORT	-	-	-	P
68.1	2.0	-	ESCORT	-	-	-	P
69.1	2.0	-	ESCORT	-	-	-	P
70.1	2.0	-	ESCORT	-	-	-	P
71.1	2.0	-	ESCORT	-	-	-	P
72.1	2.0	-	GO	ALONG	-	-	A
73.1	2.0	-	TAKE	UP TO	-	-	X
74.1	2.0	-	ESCORT	-	-	-	P
77.1	2.0	-	ESCORT	-	-	-	P
81.1	2.0	-	SHOW	-	-	-	X
82.1	2.0	-	ESCORT	-	-	-	P
83.1	2.0	-	TAKE	FOR	-	-	X
84.1	2.0	-	ESCORT	-	-	-	P
85.1	2.0	-	ESCORT	-	-	-	P
86.1	2.0	-	ESCORT	-	-	-	P
87.1	2.0	-	ESCORT	-	-	-	P
88.1	2.0	-	REACH	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	2.0	-	ESCORT	-	-	-	P
22.2	2.0	-	ESCORT	UP TO	-	-	P
23.2	2.0	-	ESCORT	-	-	-	P
24.2	2.0	-	ESCORT	-	-	-	P
25.2	2.0	-	ESCORT	-	-	-	P
27.2	2.0	-	ESCORT	-	-	-	P
28.2	2.0	-	ESCORT	-	-	-	P
30.2	2.0	-	ESCORT	-	-	-	P
31.2	2.0	-	ESCORT	-	-	-	P
32.2	2.0	-	REACH	ON	-	-	P
33.2	2.0	-	REACH	-	LEAVE	-	P
34.2	2.0	-	ESCORT	-	-	-	P
35.2	2.0	-	ESCORT	-	-	-	P
36.2	2.0	-	ESCORT	-	-	-	P
37.2	2.0	-	ESCORT	-	-	-	P
38.2	2.0	-	ESCORT	-	-	-	P
39.2	2.0	-	ESCORT	FROM	-	-	P
40.2	2.0	-	ESCORT	-	-	-	P
41.2	2.0	-	CONTINUE	WITH	-	-	T
42.2	2.0	-	ESCORT	-	-	-	P
43.2	2.0	-	ESCORT	-	-	-	P
44.2	2.0	-	ESCORT	-	-	-	P
45.2	2.0	-	ESCORT	-	-	-	P
46.2	2.0	-	GO	WITH	-	-	A
61.2	2.0	-	ESCORT	UP TO	-	-	P
62.2	2.0	-	ESCORT	-	-	-	P
63.2	2.0	-	ESCORT	-	-	-	P
64.2	2.0	-	ESCORT	-	-	-	P
65.2	2.0	-	MOVE	ALONG	-	TOGETHER	A
66.2	2.0	-	ESCORT	-	RUN	-	P
68.2	2.0	-	WALK	TOGETHER	-	-	M
69.2	2.0	-	ESCORT	-	-	-	P
71.2	2.0	-	DIRECT	-	-	-	X
72.2	2.0	-	ESCORT	-	-	-	P
73.2	2.0	-	ESCORT	-	SHOW	-	P
76.2	2.0	-	ESCORT	-	-	-	P
77.2	2.0	-	ESCORT	-	-	-	P
78.2	2.0	-	ESCORT	-	-	-	P
79.2	2.0	-	SHOW	-	FOLLOW	-	X
80.2	2.0	-	ESCORT	-	-	-	P
81.2	2.0	-	ESCORT	TO	-	-	P
82.2	2.0	-	ESCORT	-	-	-	P
83.2	2.0	-	ESCORT	-	-	-	P
84.2	2.0	-	ESCORT	-	-	-	P
85.2	2.0	-	ESCORT	-	-	-	P
86.2	2.0	-	ESCORT	-	-	-	P
87.2	2.0	-	ESCORT	-	-	-	P
88.2	2.0	-	ESCORT	-	SHOW	-	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	2.0	-	ESCORT	-	-	-	P
22.1	2.0	-	ESCORT	-	-	-	P
23.1	2.0	-	ESCORT	-	-	-	P
24.1	2.0	-	ESCORT	-	REACH	-	P
25.1	2.0	-	ESCORT	-	-	-	P
26.1	2.0	-	ESCORT	-	-	-	P
27.1	2.0	-	ESCORT	-	-	-	P
28.1	2.0	-	ACCOMPANY	-	-	-	P
30.1	2.0	-	ESCORT	-	-	-	P
31.1	2.0	-	ESCORT	-	-	-	P
32.1	2.0	-	ESCORT	UP TO	-	-	P
33.1	2.0	DECIDE	ESCORT	-	-	-	P
34.1	2.0	-	ESCORT	-	REACH	AT	P
35.1	2.0	-	ESCORT	-	-	-	P
36.1	2.0	-	ESCORT	-	-	-	P
37.1	2.0	-	ESCORT	-	-	-	P
38.1	2.0	-	ESCORT	-	-	-	P
39.1	2.0	START	PUSH	-	REACH	AT	M
40.1	2.0	-	ESCORT	-	-	-	P
41.1	2.0	-	ESCORT	-	-	-	P
42.1	2.0	-	ESCORT	UP TO	-	-	P
43.1	2.0	-	GO	TO	-	-	A
45.1	2.0	DECIDE	PULL	-	REACH	-	M
46.1	2.0	-	ESCORT	UP TO	-	-	P
47.1	2.0	-	ESCORT	-	-	-	P
48.1	2.0	-	ACCOMPANY	-	-	-	P
49.1	2.0	-	ESCORT	-	-	-	P
50.1	2.0	-	ESCORT	-	-	-	P
51.1	2.0	HAVE.START	ESCORT	-	-	-	P
61.1	2.0	-	MOVE	-	-	-	A
62.1	2.0	-	ESCORT	-	-	-	P
63.1	2.0	-	ESCORT	-	REACH	-	P
64.1	2.0	-	ESCORT	-	-	-	P
65.1	2.0	-	ESCORT	-	-	-	P
66.1	2.0	-	ESCORT	-	REACH	-	P
67.1	2.0	-	ESCORT	-	-	-	P
68.1	2.0	-	ESCORT	-	-	-	P
70.1	2.0	-	ESCORT	-	-	-	P
71.1	2.0	-	SHOW	-	-	-	X
72.1	2.0	-	ESCORT	UP TO	-	-	P
73.1	2.0	-	ESCORT	-	-	-	P
75.1	2.0	-	ESCORT	-	-	-	P
81.1	2.0	-	ESCORT	UP TO	-	-	P
82.1	2.0	-	ESCORT	ALONG UPTO	-	-	P
83.1	2.0	-	ESCORT	UP TO	-	-	P
84.1	2.0	-	ESCORT	-	SHOW	-	P
85.1	2.0	DECIDE	ESCORT	-	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	2.0	-	ESCORT	-	-	-	P
22.2	2.0	-	ESCORT	TO	-	-	P
24.2	2.0	-	REACH	-	-	-	P
25.2	2.0	-	ESCORT	UP TO	-	-	P
26.2	2.0	-	WALK	WITH UP TO	-	-	M
27.2	2.0	-	ESCORT	-	-	-	P
28.2	2.0	-	ACCOMPANY	EACH OTHER	-	-	P
29.2	2.0	-	ESCORT	-	-	-	P
30.2	2.0	-	ESCORT	-	-	-	P
31.2	2.0	-	ESCORT	-	-	-	P
33.2	2.0	-	ESCORT	BACK	REACH	TO	P
34.2	2.0	-	ESCORT	-	-	-	P
35.2	2.0	-	ACCOMPANY	-	-	-	P
36.2	2.0	-	ESCORT	-	-	-	P
37.2	2.0	-	ESCORT	-	-	-	P
38.2	2.0	-	ESCORT	-	-	-	P
39.2	2.0	-	ACCOMPANY	-	REACH	AT	P
40.2	2.0	-	ESCORT	-	-	-	P
41.2	2.0	-	ESCORT	-	-	-	P
42.2	2.0	-	ESCORT	UP TO	-	-	P
43.2	2.0	-	REACH	AT	-	-	P
44.2	2.0	-	ESCORT	-	-	-	P
45.2	2.0	DECIDE	TAKE	-	SHOW WAY	-	X
46.2	2.0	-	ESCORT	UP TO	-	-	P
47.2	2.0	-	ESCORT	-	SHOW WAY	-	P
48.2	2.0	-	ACCOMPANY	-	-	-	P
49.2	2.0	-	ESCORT	-	-	-	P
50.2	2.0	-	ESCORT	UP TO	-	-	P
51.2	2.0	-	ESCORT	-	-	-	P
61.2	2.0	-	ESCORT	-	-	-	P
63.2	2.0	-	ESCORT	-	-	-	P
65.2	2.0	-	ESCORT	-	-	-	P
66.2	2.0	-	ESCORT	UP TO	-	-	P
67.2	2.0	-	ESCORT	UP TO	-	-	P
68.2	2.0	-	ESCORT	-	-	-	P
69.2	2.0	-	ESCORT	-	-	-	P
70.2	2.0	-	STROLL	DOWN	-	-	M
71.2	2.0	-	SHOW	-	-	-	X
72.2	2.0	-	ESCORT	-	-	-	P
73.2	2.0	-	ESCORT	-	-	-	P
74.2	2.0	-	ESCORT	-	TAKE	UP TO	P
75.2	2.0	-	ESCORT	-	-	-	P
78.2	2.0	-	ESCORT	-	REACH	-	P
79.2	2.0	-	WALK	SLOWLY	-	-	M
81.2	2.0	-	ESCORT	UP TO	-	-	P
82.2	2.0	-	ESCORT	-	-	-	P
83.2	2.0	-	ESCORT	UP TO	-	-	P
84.2	2.0	-	ESCORT	-	REACH	-	P
87.2	2.0	-	ESCORT	-	TAKE	UP TO	P

(3) Juma then STRODE OFF briskly, whistling happily as he went

N A T I V E S P E A K E R S

MT	101	03.strode off
	102	03.started walking happily
	103	03.?strode on
	104	03.walking along road
	105	03.walked
	106	03.walking along
	107	03.went and walked along
	108	03.walked briskly down
	109	03.started walking
MT	201	03.set off along the path
	202	03.walking on the path
	203	03.went along path
	204	03.carried on..followed path
	205	03.walking along road
	206	03.whistled happily along road
	207	03.walks away
	208	03.-
	209	03.walking along
	210	03.went along path
	211	03.-
	212	03.walked along main road
	213	03.walked across w'd along path
	214	03.kept walking
	215	03...went the other way
	216	03.set off on the main road
	217	03.was walking
	218	03.walked along road
	219	03.went along the road
	220	03.-
	221	03.strided along
	222	03.walked along on his own
	223	03.walked along
	224	03.walked briskly

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	3.0	-	FOLLOW	-	-	-	P
33.1	3.0	CONTINUE	GO	-	-	-	A
34.1	3.0	-	CONTINUE	-	-	-	T
35.1	3.0	-	WHISTLE	ALONG	-	-	X
36.1	3.0	-	FOLLOW	-	-	-	P
37.1	3.0	-	WALK	ALONG	-	-	M
38.1	3.0	-	WALK	ON	-	-	M
39.1	3.0	-	WALK	ALONG	-	-	M
40.1	3.0	-	GO	-	-	-	A
46.1	3.0	START	?	-	-	-	?
47.1	3.0	-	TAKE	-	GO	STRAIGHT	P
48.1	3.0	-	WALK	HAPPILY	-	-	M
49.1	3.0	-	FOLLOW	-	-	-	P
50.1	3.0	-	FOLLOW	-	-	-	P
51.1	3.0	-	WALK	HURRIEDLY	-	-	M
52.1	3.0	-	START	FOR	-	-	T
53.1	3.0	-	GO	-	-	-	A
54.1	3.0	-	WALK	-	-	-	M
55.1	3.0	START	HURRY	VERY FAST	-	-	M
56.1	3.0	-	WALK	THROUGH	-	-	M
58.1	3.0	CONTINUE	WALK	-	-	-	M
61.1	3.0	HAVE TO	HURRY	UP	-	-	M
62.1	3.0	-	WALK	HURRIEDLY	-	-	M
63.1	3.0	START	WALK	HURRIEDLY	-	-	M
64.1	3.0	-	PASS?	-	-	-	P
66.1	3.0	-	GO	-	-	-	A
67.1	3.0	-	CONTINUE	-	-	-	T
69.1	3.0	-	WALK	QUICKLY	-	-	M
70.1	3.0	-	WALK	-	HURRY	-	M
71.1	3.0	-	TAKE	-	-	-	P
72.1	3.0	START	WALK	VERY FAST	-	-	M
75.1	3.0	DECIDE	WALK	ALONG TO	-	-	M
76.1	3.0	DECIDE	TAKE	-	-	-	P
77.1	3.0	-	WALK	HURRIEDLY	-	-	M
78.1	3.0	-	RUSH	TOWARDS	-	-	M
79.1	3.0	-	GO	-	-	-	A
80.1	3.0	-	GO	HAPPILY	-	-	A
82.1	3.0	-	GO	SLOWLY	-	-	A
84.1	3.0	START	WALK	-	-	-	M
85.1	3.0	-	HURRY	-	-	-	M
86.1	3.0	START	WALK	QUICKLY	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	3.0	-	GO	ON	-	-	A
34.2	3.0	-	CONTINUE	-	-	-	T
35.2	3.0	-	GO	TO	-	-	A
37.2	3.0	START	WALK	-	-	-	M
38.2	3.0	-	WALK	-	-	-	M
39.2	3.0	-	WALK	-	-	-	M
40.2	3.0	-	WALK	ALONG	-	-	M
41.2	3.0	-	FOLLOW	-	-	-	P
42.2	3.0	-	FOLLOW	-	-	-	P
46.2	3.0	-	STRIDE	TOWARDS	-	-	M
47.2	3.0	-	GO	-	-	-	A
48.2	3.0	-	WALK	HAPPILY	-	-	M
49.2	3.0	-	FOLLOW	-	-	-	P
50.2	3.0	-	FOLLOW	-	-	-	P
51.2	3.0	-	STROLL	ALONG	-	-	M
52.2	3.0	-	START	OFF	-	-	T
53.2	3.0	-	WALK	-	-	-	M
54.2	3.0	-	GO	ON	MOVE	FAST	A
55.2	3.0	START	WALK	QUICKLY	-	-	M
56.2	3.0	-	CONTINUE	-	-	-	T
57.2	3.0	-	WALK	SLOWLY	-	-	M
58.2	3.0	CONTINUE	WALK	-	-	-	M
61.2	3.0	START	WALK	VERY FAST	-	-	M
62.2	3.0	-	WALK	-	MARCH	MAJESTICAL	M
63.2	3.0	-	TAKE	-	WALK	-	P
64.2	3.0	-	GO	-	-	-	A
67.2	3.0	-	WALK	BRISKLY	-	-	M
69.2	3.0	START	WALK	ALONG	-	-	M
71.2	3.0	START	WALK	-	-	-	M
72.2	3.0	-	WALK	VERY FAST	-	-	M
73.2	3.0	-	WALK	-	-	-	M
74.2	3.0	-	WALK	MERRILY	-	-	M
75.2	3.0	-	TAKE	-	-	-	P
76.2	3.0	-	WALK	BR'KLY ALO	-	-	M
77.2	3.0	-	CONTINUE	-	-	-	T
78.2	3.0	-	WALK	HURRIEDLY	-	-	M
79.2	3.0	-	GO	-	-	-	A
80.2	3.0	-	WALK	HAPPILY	-	-	M
81.2	3.0	-	TRAVEL	-	-	-	A
82.2	3.0	START	WALK	-	-	-	M
83.2	3.0	-	WALK	MAJESTICAL	-	-	M
84.2	3.0	START	WALK	HAPPILY	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.1	3.0	-	GO	-	-	-	A
23.1	3.0	-	GO	-	WALK	FASTER	A
25.1	3.0	-	GO	TO	-	-	A
26.1	3.0	-	FOLLOW	-	-	-	P
28.1	3.0	-	GO	ON	-	-	A
29.1	3.0	-	GO	-	-	-	A
31.1	3.0	-	CONTINUE	-	-	-	T
33.1	3.0	START	GO	FASTER	-	-	A
34.1	3.0	DECIDE	GO	-	-	-	A
35.1	3.0	-	GO	-	-	-	A
36.1	3.0	-	GO	QUICKLY	-	-	A
37.1	3.0	-	GO	ALONG	-	-	A
38.1	3.0	-	FOLLOW	-	-	-	P
41.1	3.0	-	CONTINUE	-	-	-	T
42.1	3.0	-	GO	ALONG	WALK	-	A
43.1	3.0	-	GO	ON	-	-	A
44.1	3.0	-	PROCEED	ON	-	-	P
45.1	3.0	-	GO	TO	-	-	A
46.1	3.0	-	GO	ON	-	-	A
61.1	3.0	-	HURRY	-	GO	HOME	M
62.1	3.0	DECIDE	WALK	QUICKLY	-	-	M
63.1	3.0	-	GO	UP TO	-	-	A
64.1	3.0	-	CONTINUE	-	-	-	T
66.1	3.0	-	GO	-	-	-	A
67.1	3.0	-	GO	ALONG	-	-	A
68.1	3.0	-	GO	ALONE	-	-	A
72.1	3.0	-	GO	THROUGH	-	-	A
73.1	3.0	-	GO	-	-	-	A
74.1	3.0	-	CONTINUE	-	-	-	T
75.1	3.0	-	WALK	ALONE	-	-	M
76.1	3.0	CONTINUE	GO	-	-	-	A
77.1	3.0	-	GO	-	FOLLOW	-	A
78.1	3.0	-	GO	ALONE	-	-	A
81.1	3.0	-	GO	-	-	-	A
82.1	3.0	-	WALK	ALONE	-	-	M
83.1	3.0	-	CONTINUE	-	-	-	T
84.1	3.0	-	WALK	ALONE	-	-	M
85.1	3.0	-	GO	-	-	-	A
86.1	3.0	-	GO	-	-	-	A
88.1	3.0	-	GO	ALONE	-	-	A

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	3.0	-	GO	ALONG	-	-	A
22.2	3.0	-	GO	-	-	-	A
23.2	3.0	CONTINUE	PASS	THROUGH	-	-	P
24.2	3.0	-	FOLLOW	-	-	-	P
25.2	3.0	-	GO	-	-	-	A
27.2	3.0	-	GO	ALONE	-	-	A
28.2	3.0	-	CONTINUE	-	-	-	T
29.2	3.0	-	GO	FURTHER	-	-	A
30.2	3.0	-	PASS	-	-	-	P
32.0	3.0	-	GO	-	-	-	A
33.2	3.0	-	WALK	-	-	-	M
34.2	3.0	-	GO	-	-	-	A
35.2	3.0	-	WALK	AROUND	-	-	M
36.2	3.0	-	GO	HOME	-	-	A
37.2	3.0	-	WALK	-	-	-	M
38.2	3.0	-	GO	BY HIMSELF	-	-	A
40.2	3.0	-	RUN	-	-	-	M
41.2	3.0	-	CONTINUE	-	-	-	T
42.2	3.0	-	GO	ON	-	-	A
43.2	3.0	-	GO	-	-	-	A
44.2	3.0	-	WALK	-	-	-	M
45.2	3.0	-	GO	THROUGH	-	-	A
46.2	3.0	-	GO	ALONE	-	-	A
61.2	3.0	-	STRIDE	ALONG	-	-	M
62.2	3.0	-	STROLL	-	-	-	M
63.2	3.0	-	GO	BRISKLY	-	-	A
64.2	3.0	-	CONTINUE	-	-	-	T
65.2	3.0	-	WALK	ALONG	-	-	M
66.2	3.0	-	STROLL	ALONG	-	-	M
68.2	3.0	-	WALK	-	-	-	M
69.2	3.0	-	WALK	ALONE	-	-	M
72.2	3.0	-	GO	-	-	-	A
73.2	3.0	-	WALK	-	-	-	M
76.2	3.0	-	FOLLOW	-	-	-	P
77.2	3.0	-	GO	ALONG	-	-	A
78.2	3.0	-	?	-	-	-	?
79.2	3.0	-	GO	-	-	-	A
81.2	3.0	-	WALK	ON	-	-	M
82.2	3.0	-	GO	ALONG	-	-	A
83.2	3.0	-	STROLL	ALONG	-	-	M
84.2	3.0	-	WALK	ALONG	-	-	M
85.2	3.0	-	GO	-	-	-	A
86.2	3.0	-	?	-	-	-	?
87.2	3.0	-	GO	-	-	-	A
88.2	3.0	-	GO	ALONG	-	-	A

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	3.0	START	GO	-	-	-	A
22.1	3.0	-	CONTINUE	-	-	-	T
23.1	3.0	START	WALK	ALONG	-	-	M
24.1	3.0	-	WALK	-	-	-	M
25.1	3.0	-	GO	-	-	-	A
26.1	3.0	START	GO	-	-	-	A
27.1	3.0	START	WALK	-	-	-	M
30.1	3.0	-	CONTINUE	-	-	-	T
31.1	3.0	-	GO	-	-	-	A
32.1	3.0	-	FOLLOW	-	-	-	P
33.1	3.0	-	CONTINUE	-	-	-	T
34.1	3.0	CONTINUE	GO	-	-	-	A
35.1	3.0	-	CONTINUE	-	-	-	T
36.1	3.0	-	GO	TO	-	-	A
38.1	3.0	-	GO	HOME	-	-	A
39.1	3.0	-	WALK	STEPBYSTEP	-	-	M
41.1	3.0	-	GO	-	-	-	A
42.1	3.0	-	WALK	ALONG	-	-	M
43.1	3.0	-	GO	TO	-	-	A
46.1	3.0	-	GO	-	-	-	A
47.1	3.0	-	GO	-	-	-	A
48.1	3.0	-	GO	-	-	-	A
49.1	3.0	START	GO	-	-	-	A
50.1	3.0	-	GO	-	-	-	A
51.1	3.0	-	GO	AT	-	-	A
61.1	3.0	-	START	ALONG	-	-	T
62.1	3.0	-	CONTINUE	-	-	-	T
63.1	3.0	-	GO	ALONG	-	-	A
64.1	3.0	START	GO	ALONG	-	-	A
65.1	3.0	-	GO	STEPBYSTEP	-	-	A
66.1	3.0	-	CONTINUE	-	-	-	T
67.1	3.0	-	WALK	-	-	-	M
69.1	3.0	-	WALK	ALL ALONE	HURRY	-	M
70.1	3.0	-	LEAVE	-	WALK	-	P
71.1	3.0	START	WALK	-	-	-	M
72.1	3.0	START	GO	-	-	-	A
73.1	3.0	-	TREK	-	-	-	M
74.1	3.0	-	WALK	-	-	-	M
75.1	3.0	SET?	WALK	ALONE	-	-	M
82.1	3.0	CONTINUE	GO	-	-	-	A
83.1	3.0	START	GO	HOME	-	-	A
84.1	3.0	-	GET	-	-	-	A
85.1	3.0	-	WALK	-	-	-	M
86.1	3.0	-	GO	-	-	-	A

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	3.0	-	GO	ON	-	-	A
22.2	3.0	-	CONTINUE	-	-	-	T
25.2	3.0	-	WALK	-	-	-	M
26.2	3.0	START	GO	ALONG	-	-	A
27.2	3.0	-	WALK	-	-	-	M
28.2	3.0	-	WALK	-	-	-	M
29.2	3.0	-	TAKE	-	WALK	-	P
30.2	3.0	-	WALK	-	-	-	M
31.2	3.0	-	GO	ON	-	-	A
33.2	3.0	START	STROLL	SLOWLY	-	-	M
34.2	3.0	-	FOLLOW	-	-	-	P
35.2	3.0	-	CONTINUE	-	-	-	T
36.2	3.0	-	CONTINUE	-	-	-	T
37.2	3.0	-	GO	BACK	-	-	A
38.2	3.0	-	GO	-	-	-	A
39.2	3.0	-	GO	ON	-	-	A
40.2	3.0	START	GO	-	-	-	A
41.2	3.0	-	FOLLOW	-	-	-	P
42.2	3.0	START	WALK	-	-	-	M
43.2	3.0	-	GO	ON	-	-	A
44.2	3.0	-	WALK	SLOWLY	-	-	M
45.2	3.0	-	GO	ON	-	-	A
46.2	3.0	-	CONTINUE	-	-	-	T
47.2	3.0	-	GO	-	-	-	A
48.2	3.0	-	GO	-	-	-	A
49.2	3.0	-	GO	ON	-	-	A
50.2	3.0	-	WALK	TO	-	-	M
51.2	3.0	REMAIN	GO	-	-	-	A
61.2	3.0	-	WALK	-	-	-	M
63.2	3.0	-	WALK	ALONG	-	-	M
65.2	3.0	-	GO	ON	-	-	A
66.2	3.0	-	CONTINUE	-	-	-	T
67.2	3.0	-	WALK	-	-	-	M
68.2	3.0	-	STRIDE	ALONG	-	-	M
69.2	3.0	-	WALK	QUICKLY TO	-	-	M
70.2	3.0	-	STROLL	UPWARDS	-	-	M
71.2	3.0	-	WALK	-	-	-	M
72.2	3.0	START	GO	-	-	-	A
73.2	3.0	-	TREK	-	-	-	M
74.2	3.0	-	CONTINUE	-	-	-	T
75.2	3.0	-	STRIDE?	ALONG	-	-	M
79.2	3.0	-	TAKE	-	-	-	P
81.2	3.0	-	WALK	ALONG	-	-	M
82.2	3.0	-	GO	ALONG	-	-	A
83.2	3.0	-	TAKE	-	-	-	P
84.2	3.0	-	FOLLOW	-	-	-	P

(4) When he REACHED a signboard.....

N A T I V E S P E A K E R S

MT	101	04.came to signboard
	102	04.came across ditch
	103	04.got to river...ditch
	104	04.came to river
	105	04.came to sign
	106	04.came to sign
	107	04.reached signpost
	108	04.got to dam
	109	04.came to sign
MT	201	04.-
	202	04.saw a sign
	203	04.-
	204	04.came to notice
	205	04.came to ditch
	206	04.came to signpost
	207	04.comes to sign
	208	04.-
	209	04.saw the ditch
	210	04.came to signpost
	211	04.came to ditch
	212	04.came to signboard
	213	04.-
	214	04.came to noticeboard
	215	04.saw a sign
	216	04.saw a signpost
	217	04.-
	218	04.came to notice
	219	04.saw a signpost
	220	04.-
	221	04.saw a notice
	222	04.comes to ditch
	223	04.-
	224	04.saw a notice

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	4.0	-	REACH	AT	-	-	P
33.1	4.0	-	REACH	-	-	-	P
34.1	4.0	-	REACH	-	-	-	P
36.1	4.0	-	GO	NEAR	-	-	A
37.1	4.0	-	REACH	-	-	-	P
38.1	4.0	-	REACH	-	-	-	P
39.1	4.0	-	REACH	-	-	-	P
40.1	4.0	-	FIND	-	-	-	P
48.1	4.0	-	REACH	-	-	-	P
49.1	4.0	-	REACH	AT	-	-	P
51.1	4.0	-	COME	TO	-	-	P
52.1	4.0	-	WALK	-	-	-	M
53.1	4.0	-	FIND	-	-	-	P
54.1	4.0	-	REACH	AT	-	-	P
55.1	4.0	-	REACH	AT	-	-	P
56.1	4.0	-	REACH	-	-	-	P
58.1	4.0	-	REACH	-	-	-	P
61.1	4.0	-	REACH	-	-	-	P
62.1	4.0	-	REACH	-	-	-	P
66.1	4.0	-	FIND	-	-	-	P
67.1	4.0	-	MEET	-	-	-	X
68.1	4.0	-	REACH	-	-	-	P
69.1	4.0	-	REACH	-	-	-	P
70.1	4.0	-	REACH	-	-	-	P
72.1	4.0	-	FIND	-	-	-	P
73.1	4.0	-	COME	ACROSS	-	-	P
77.1	4.0	-	LEAVE	-	-	-	P
78.1	4.0	-	COME	TO	-	-	P
81.1	4.0	-	TRAVEL	-	-	-	A
82.1	4.0	-	COME	TO	-	-	P
84.1	4.0	-	?	-	-	-	?
85.1	4.0	-	FOLLOW	-	-	-	P
86.1	4.0	-	GET	-	-	-	A

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.2	4.0	-	COME	ACROSS	-	-	P
34.2	4.0	-	REACH	AT	-	-	P
35.2	4.0	-	REACH	-	-	-	P
36.2	4.0	-	GO	UP TO	-	-	A
37.2	4.0	-	REACH	-	-	-	P
38.2	4.0	-	SEE	-	-	-	X
39.2	4.0	-	REACH	-	-	-	P
41.2	4.0	-	REACH	-	-	-	P
47.2	4.0	-	REACH	-	-	-	P
48.2	4.0	-	REACH	-	-	-	P
49.2	4.0	-	REACH?	IN	-	-	P
50.2	4.0	-	REACH	-	-	-	P
51.2	4.0	-	COME	TO	-	-	P
52.2	4.0	-	WALK	TOWARDS	-	-	M
53.2	4.0	-	COME	TO	-	-	P
54.2	4.0	-	FIND	-	-	-	P
55.2	4.0	-	COME	TO	-	-	P
57.2	4.0	-	COME	TO	-	-	P
58.2	4.0	-	REACH	-	-	-	P
61.2	4.0	-	COME	ACROSS	-	-	P
62.2	4.0	-	REACH	-	-	-	P
63.2	4.0	-	FIND	-	-	-	P
64.2	4.0	-	REACH	-	-	-	P
65.2	4.0	-	REACH	-	-	-	P
66.2	4.0	-	REACH	-	-	-	P
67.2	4.0	-	REACH	-	-	-	P
68.2	4.0	-	REACH	-	-	-	P
69.2	4.0	-	REACH	-	-	-	P
71.2	4.0	-	REACH	-	-	-	P
72.2	4.0	-	REACH	-	-	-	P
73.2	4.0	-	COME	TO	-	-	P
74.2	4.0	-	REACH	-	-	-	P
75.2	4.0	-	COME	TO	-	-	P
76.2	4.0	-	REACH	-	-	-	P
77.2	4.0	-	REACH	-	-	-	P
78.2	4.0	-	REACH	-	-	-	P
79.2	4.0	-	REACH	-	-	-	P
80.2	4.0	-	SLIP?	-	-	-	?
81.2	4.0	-	REACH	-	-	-	P
82.2	4.0	-	COME	ACROSS	-	-	P
83.2	4.0	-	REACH	-	-	-	P
84.2	4.0	-	REACH	-	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	4.0	-	REACH	-	-	-	P
22.1	4.0	-	REACH	-	-	-	P
23.1	4.0	-	REACH	AT	-	-	P
24.1	4.0	-	REACH	-	-	-	P
25.1	4.0	-	REACH	-	-	-	P
28.1	4.0	-	FIND	-	-	-	P
29.1	4.0	-	SEE	-	-	-	X
31.1	4.0	-	PASS	-	-	-	P
32.1	4.0	-	REACH	-	-	-	P
33.1	4.0	-	FIND	-	-	-	P
34.1	4.0	-	REACH	-	-	-	P
35.1	4.0	-	FIND	-	-	-	P
36.1	4.0	-	REACH	-	-	-	P
37.1	4.0	-	REACH	-	-	-	P
38.1	4.0	-	REACH	-	-	-	P
39.1	4.0	-	REACH	-	-	-	P
41.1	4.0	-	PASS	NEAR	-	-	P
42.1	4.0	-	MEET	-	-	-	X
43.1	4.0	-	REACH	-	-	-	P
44.1	4.0	-	REACH	-	-	-	P
45.1	4.0	-	FOLLOW	-	-	-	P
46.1	4.0	-	REACH	-	-	-	P
61.1	4.0	-	REACH	-	-	-	P
62.1	4.0	-	REACH	-	-	-	P
64.1	4.0	-	REACH	-	-	-	P
65.1	4.0	-	REACH	-	-	-	P
67.1	4.0	-	FIND	-	-	-	P
70.1	4.0	-	COME	TO	-	-	P
72.1	4.0	-	REACH	-	-	-	P
73.1	4.0	-	REACH	TO	-	-	P
74.1	4.0	-	REACH	-	-	-	P
75.1	4.0	-	REACH	-	-	-	P
76.1	4.0	-	REACH	-	-	-	P
77.1	4.0	-	REACH	-	-	-	P
79.1	4.0	-	REACH	-	-	-	P
81.1	4.0	-	REACH	-	-	-	P
82.1	4.0	-	REACH	-	-	-	P
84.1	4.0	-	REACH	-	-	-	P
85.1	4.0	-	REACH	-	-	-	P
88.1	4.0	DECIDE	TAKE	-	-	-	X

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	4.0	-	REACH	TO	-	-	P
22.2	4.0	-	REACH	-	-	-	P
23.2	4.0	-	REACH	-	-	-	P
24.2	4.0	-	REACH	-	-	-	P
25.2	4.0	-	FIND	-	-	-	P
28.2	4.0	-	FIND	-	-	-	P
29.2	4.0	-	MEET	-	-	-	X
30.2	4.0	-	REACH	-	-	-	P
31.2	4.0	-	GO	-	FIND	-	A
32.2	4.0	-	REACH	-	-	-	P
33.2	4.0	-	REACH	-	-	-	P
34.2	4.0	-	APPROACH	-	-	-	P
35.2	4.0	-	REACH	-	-	-	P
36.2	4.0	-	REACH	-	-	-	P
37.2	4.0	-	SEE	-	-	-	X
38.2	4.0	-	REACH	-	-	-	P
39.2	4.0	-	REACH	-	-	-	P
40.2	4.0	-	REACH	-	-	-	P
41.2	4.0	-	REACH	-	-	-	P
43.2	4.0	-	REACH	-	-	-	P
44.2	4.0	-	SEE	-	-	-	X
46.2	4.0	-	REACH	AT	-	-	P
61.2	4.0	-	COME	ACROSS	-	-	P
62.2	4.0	-	REACH	-	-	-	P
63.2	4.0	-	REACH	-	-	-	P
64.2	4.0	-	REACH	-	-	-	P
66.2	4.0	-	GO	UP TO	-	-	A
68.2	4.0	-	REACH	-	-	-	P
69.2	4.0	-	COME	ACROSS	-	-	P
71.2	4.0	-	REACH	-	-	-	P
72.2	4.0	-	REACH	-	-	-	P
73.2	4.0	-	REACH	-	-	-	P
76.2	4.0	-	REACH	-	-	-	P
77.2	4.0	-	MEET	-	-	-	X
78.2	4.0	-	?	-	-	-	?
81.2	4.0	-	COME	TO	-	-	P
82.2	4.0	-	REACH	-	-	-	P
83.2	4.0	-	REACH	-	-	-	P
84.2	4.0	-	REACH	-	-	-	P
85.2	4.0	-	SEE	-	-	-	X
86.2	4.0	-	?	-	-	-	?
87.2	4.0	-	SEE	-	-	-	X
88.2	4.0	-	REACH	-	-	-	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	4.0	-	REACH	AT	-	-	P
22.1	4.0	-	REACH	-	-	-	P
23.1	4.0	-	REACH	-	-	-	P
24.1	4.0	-	REACH	-	-	-	P
25.1	4.0	-	FIND	-	-	-	P
26.1	4.0	-	REACH	-	-	-	P
27.1	4.0	-	REACH	-	-	-	P
28.1	4.0	-	REACH	-	-	-	P
32.1	4.0	-	COME	TO	-	-	P
33.1	4.0	-	REACH	AT	-	-	P
34.1	4.0	-	REACH	-	-	-	P
35.1	4.0	-	REACH	AT	-	-	P
39.1	4.0	-	REACH	TO	-	-	P
40.1	4.0	-	FIND	-	-	-	P
41.1	4.0	-	COME	TO	-	-	P
42.1	4.0	-	REACH	-	-	-	P
43.1	4.0	-	REACH	-	-	-	P
45.1	4.0	-	REACH	-	-	-	P
46.1	4.0	-	COME	ACROSS	-	-	P
47.1	4.0	-	REACH	NEAR	-	-	P
49.1	4.0	-	REACH	-	-	-	P
50.1	4.0	-	REACH	-	-	-	P
61.1	4.0	-	REACH	-	-	-	P
62.1	4.0	-	GO	-	-	-	A
64.1	4.0	-	REACH	-	-	-	P
65.1	4.0	-	REACH	-	-	-	P
66.1	4.0	-	REACH	-	-	-	P
67.1	4.0	-	REACH	-	-	-	P
68.1	4.0	-	REACH	-	-	-	P
69.1	4.0	-	REACH	-	-	-	P
70.1	4.0	-	REACH	-	-	-	P
71.1	4.0	-	REACH	-	-	-	P
72.1	4.0	-	REACH	-	-	-	P
73.1	4.0	-	REACH	-	-	-	P
74.1	4.0	-	REACH	-	-	-	P
75.1	4.0	-	TURN?	-	-	-	P
82.1	4.0	-	REACH	-	-	-	P
83.1	4.0	-	REACH	-	-	-	P
84.1	4.0	-	REACH	-	-	-	P
85.1	4.0	-	REACH	-	-	-	P
86.1	4.0	-	REACH	-	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	4.0	-	COME	ACROSS	-	-	P
22.2	4.0	-	REACH	-	-	-	P
24.2	4.0	-	REACH	-	-	-	P
25.2	4.0	-	REACH	NEAR	-	-	P
26.2	4.0	-	REACH	-	-	-	P
27.2	4.0	-	COME	TO	-	-	P
28.2	4.0	-	REACH	-	-	-	P
29.2	4.0	-	REACH	-	-	-	P
30.2	4.0	-	REACH	-	-	-	P
31.2	4.0	-	REACH	-	-	-	P
33.2	4.0	-	REACH	AT	-	-	P
35.2	4.0	-	ARRIVE	AT	-	-	P
37.2	4.0	-	ARRIVE	ON	-	-	P
38.2	4.0	-	SEE	-	-	-	X
39.2	4.0	-	REACH	AT	-	-	P
40.2	4.0	-	REACH	ON	-	-	P
42.2	4.0	-	REACH	-	-	-	P
43.2	4.0	-	REACH	AT	-	-	P
44.2	4.0	-	REACH	-	-	-	P
45.2	4.0	-	REACH	-	-	-	P
46.2	4.0	-	REACH	AT	-	-	P
47.2	4.0	-	MEET	-	-	-	X
48.2	4.0	-	REACH	-	-	-	P
49.2	4.0	-	REACH?	-	-	-	P
50.2	4.0	-	REACH	-	-	-	P
51.2	4.0	-	REACH	AT	-	-	P
61.2	4.0	-	COME	ACROSS	-	-	P
63.2	4.0	-	REACH	-	-	-	P
65.2	4.0	-	REACH	-	-	-	P
66.2	4.0	-	REACH	-	-	-	P
67.2	4.0	-	REACH	-	-	-	P
68.2	4.0	-	REACH	-	-	-	P
69.2	4.0	-	COME	BY	-	-	P
70.2	4.0	-	REACH	-	-	-	P
71.2	4.0	-	REACH	BY	-	-	P
72.2	4.0	-	REACH	-	-	-	P
74.2	4.0	-	REACH	-	-	-	P
75.2	4.0	-	COME	TO	-	-	P
78.2	4.0	-	REACH	-	-	-	P
81.2	4.0	-	REACH	-	-	-	P
82.2	4.0	-	JUMP	OVER	-	-	M
83.2	4.0	-	REACH	-	-	-	P
84.2	4.0	-	REACH	-	-	-	P
87.2	4.0	-	REACH	-	-	-	P

(4) he JUMPED over the ditch at the side of the road....

N A T I V E S P E A K E R S

MT 101 041.jumped a ditch
102 041.jumped over it
103 041.jumped over
104 041.decided...jump
105 041.jump over
106 041.jumped
107 041.jumped over
108 041.jumped over
109 041.jumped over ditch

MT 201 041.jumped off at a ditch
202 041.jumped across
203 041.jumped a -?-
204 041.jumped up on to over bridge
205 041.jump over
206 041.jumped over ditch
207 041.jumps over ditch on to path
208 041.-
209 041.jumped over it
210 041.jumped a ditch
211 041.jumped over
212 041.jumped across ditch
213 041.jumped over ditch
214 041.-
215 041.jumped over sort of ditch
216 041.jumped
217 041.?ran...jumped over ditch
218 041.jumped over ditch
219 041.jumped on to bank
220 041.jumped over small ditch
221 041.jumped over fence
222 041.jumps over
223 041.jumped over fence
224 041.jumped ditch

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	4.1	-	JUMP	-	PASS	-	M
33.1	4.1	-	JUMP	OVER	-	-	M
34.1	4.1	-	JUMP	-	PASS	-	M
35.1	4.1	-	JUMP	OVER	-	-	M
36.1	4.1	-	JUMP	-	-	-	M
37.1	4.1	-	JUMP	-	-	-	M
38.1	4.1	-	JUMP	-	-	-	M
39.1	4.1	-	JUMP	OVER	-	-	M
40.1	4.1	-	JUMP	-	PASS	-	M
42.1	4.1	-	CROSS	-	-	-	P
46.1	4.1	-	JUMP	OVER	-	-	M
48.1	4.1	-	JUMP	OVER	-	-	M
49.1	4.1	-	CLIMB	-	-	-	M
50.1	4.1	-	PASS	THROUGH	-	-	P
51.1	4.1	-	JUMP	OVER	-	-	M
53.1	4.1	DECIDE	JUMP	OVER	-	-	M
54.1	4.1	DECIDE	JUMP	OVER	-	-	M
55.1	4.1	-	JUMP	ACROSS	-	-	M
58.1	4.1	-	JUMP	-	-	-	M
61.1	4.1	-	JUMP	-	-	-	M
62.1	4.1	-	JUMP	OVER	-	-	M
63.1	4.1	-	JUMP	OVER	-	-	M
64.1	4.1	-	JUMP	OVER	-	-	M
66.1	4.1	-	JUMP	OVER	-	-	M
67.1	4.1	TRY	JUMP	-	-	-	M
68.1	4.1	-	JUMP	OVER	-	-	M
69.1	4.1	-	JUMP	OVER	-	-	M
70.1	4.1	-	JUMP	OVER	-	-	M
71.1	4.1	-	JUMP	-	-	-	M
72.1	4.1	-	CROSS	-	JUMP	-	P
73.1	4.1	-	MAKE JUMP	OVER	-	-	X
74.1	4.1	-	JUMP	OVER	-	-	M
75.1	4.1	-	CROSS	-	-	-	P
76.1	4.1	-	JUMP	OVER	-	-	M
77.1	4.1	-	JUMP	INTO	-	-	M
78.1	4.1	-	JUMP	OVER	-	-	M
79.1	4.1	-	PASS	OVER?	-	-	P
80.1	4.1	-	JUMP	OVER	-	-	M
81.1	4.1	-	JUMP	OVER	-	-	M
82.1	4.1	-	JUMP	OVER	-	-	M
84.1	4.1	-	GO	THROUGH	JUMP	OVER	A
85.1	4.1	HAVE TO	JUMP	ACROSS	-	-	M
86.1	4.1	HAVE TO	JUMP	OVER	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	4.1	-	JUMP	-	-	-	M
33.2	4.1	-	JUMP	OVER	-	-	M
34.2	4.1	-	JUMP	OVER	-	-	M
35.2	4.1	-	JUMP	OVER	-	-	M
36.2	4.1	-	JUMP	OVER	-	-	M
37.2	4.1	-	JUMP	THROUGH	-	-	M
38.2	4.1	-	JUMP	INTO	CROSS	-	M
39.2	4.1	-	JUMP	OFF?	-	-	M
40.2	4.1	-	JUMP	-	PASS	THROUGH	M
41.2	4.1	TRY	JUMP	-	-	-	M
46.2	4.1	-	JUMP	OVER	-	-	M
47.2	4.1	-	PASS	OVER	-	-	P
48.2	4.1	-	CLIMB	OVER	-	-	M
49.2	4.1	-	JUMP	OVER	-	-	M
50.2	4.1	-	JUMP	OVER	-	-	M
51.2	4.1	-	JUMP	OVER	-	-	M
53.2	4.1	-	JUMP	OVER	-	-	M
54.2	4.1	-	JUMP	OVER	-	-	M
55.2	4.1	TRY	CROSS	TO	-	-	P
56.2	4.1	-	CROSS	-	-	-	P
57.2	4.1	-	JUMP	OVER	-	-	M
58.2	4.1	-	JUMP	OVER	-	-	M
61.2	4.1	-	LEAP	OVER	-	-	M
62.2	4.1	-	JUMP	OVER TO	-	-	M
63.2	4.1	-	JUMP	ACROSS	-	-	M
64.2	4.1	-	JUMP	OVER	-	-	M
65.2	4.1	-	JUMP	OVER	-	-	M
66.2	4.1	-	JUMP	OVER	-	-	M
67.2	4.1	-	JUMP	ACROSS	-	-	M
68.2	4.1	HAVE TO	JUMP	OVER	-	-	M
69.2	4.1	-	JUMP	OVER	-	-	M
71.2	4.1	-	JUMP	OVER	-	-	M
72.2	4.1	-	CROSS	-	-	-	P
73.2	4.1	DECIDE	JUMP	OVER	-	-	M
74.2	4.1	-	JUMP	OVER	-	-	M
75.2	4.1	-	JUMP	OVER	-	-	M
76.2	4.1	-	BRANCH	-	JUMP	OVER	P
77.2	4.1	-	JUMP	OUT OF	-	-	M
78.2	4.1	-	CROSS	OVER	JUMP	OVER	P
79.2	4.1	HAVE TO	PASS	OVER	..JUMP	-	P
80.2	4.1	-	JUMP	OVER	-	-	M
81.2	4.1	-	JUMP	OVER	-	-	M
82.2	4.1	-	JUMP	OVER	-	-	M
83.2	4.1	-	JUMP	OVER	-	-	M
84.2	4.1	-	JUMP	OVER	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	4.1	-	GO	OVER	-	-	A
22.1	4.1	-	JUMP	OVER	-	-	M
23.1	4.1	-	JUMP	ACROSS	-	-	M
24.1	4.1	-	JUMP	-	-	-	M
28.1	4.1	TRY	JUMP	-	-	-	M
30.1	4.1	-	PASS	-	-	-	P
33.1	4.1	-	JUMP	OVER	-	-	M
35.1	4.1	DECIDE	PASS	OVER	-	-	P
36.1	4.1	-	PASS	THROUGH	JUMP	OVER	P
37.1	4.1	-	JUMP	-	-	-	M
38.1	4.1	TRY	JUMP	-	CROSS	-	M
39.1	4.1	-	JUMP	-	-	-	M
40.1	4.1	-	CROSS	-	-	-	P
41.1	4.1	TRY	OVER	-	CROSS	-	P
42.1	4.1	-	JUMP	-	-	-	M
43.1	4.1	-	CROSS	-	-	-	P
44.1	4.1	-	JUMP	-	CROSS	-	M
45.1	4.1	-	JUMP	-	CROSS	-	M
61.1	4.1	-	CROSS	-	-	-	P
62.1	4.1	-	JUMP	-	-	-	M
63.1	4.1	-	JUMP	OVER	-	-	M
64.1	4.1	-	JUMP	OVER	-	-	M
65.1	4.1	DECIDE	JUMP	OVER	-	-	M
66.1	4.1	-	JUMP	-	-	-	M
67.1	4.1	TRY	JUMP	OVER	-	-	M
68.1	4.1	-	JUMP	-	-	-	M
69.1	4.1	TRY	PASS	ACROSS	-	-	P
70.1	4.1	-	JUMP	OVER	-	-	M
72.1	4.1	-	JUMP	ACROSS	-	-	M
73.1	4.1	-	CLIMB	-	-	-	M
74.1	4.1	-	JUMP	OVER	-	-	M
75.1	4.1	-	JUMP	OVER	-	-	M
76.1	4.1	FORCE	JUMP	OVER	-	-	M
77.1	4.1	-	CROSS	-	-	-	P
78.1	4.1	-	JUMP	OVER	-	-	M
79.1	4.1	-	JUMP	OVER	-	-	M
81.1	4.1	-	JUMP	-	-	-	M
82.1	4.1	-	JUMP	OVER	-	-	M
83.1	4.1	-	CROSS	-	-	-	P
84.1	4.1	-	CROSS	-	-	-	P
85.1	4.1	-	GO	PAST	-	-	A
86.1	4.1	-	CROSS	-	-	-	P
87.1	4.1	-	CROSS	-	JUMP	OVER	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	4.1	-	PASS	-	-	-	P
22.2	4.1	-	JUMP	OVER	-	-	M
23.2	4.1	-	GO	ACROSS	-	-	A
24.2	4.1	-	JUMP	OVER	-	-	M
27.2	4.1	-	CROSS	-	JUMP	-	P
28.2	4.1	TRY	JUMP	-	-	-	M
29.2	4.1	-	JUMP	OVER	-	-	M
30.2	4.1	-	JUMP	OVER	-	-	M
31.2	4.1	-	JUMP	OVER	-	-	M
32.2	4.1	-	JUMP	OVER	-	-	M
33.2	4.1	-	JUMP	OVER	-	-	M
34.2	4.1	DECIDE	JUMP	ACROSS	-	-	M
35.2	4.1	-	JUMP	OVER	-	-	M
36.2	4.1	-	JUMP	OVER	-	-	M
37.2	4.1	-	JUMP	OVER	-	-	M
38.2	4.1	-	JUMP	-	CROSS	-	M
39.2	4.1	-	JUMP	OVER	-	-	M
40.2	4.1	-	JUMP	OVER	-	-	M
41.2	4.1	-	JUMP	OVER	-	-	M
42.2	4.1	-	JUMP	OVER	-	-	M
43.2	4.1	-	JUMP	OVER	-	-	M
44.2	4.1	-	CROSS	-	-	-	P
45.2	4.1	-	JUMP	OVER	-	-	M
61.2	4.1	-	JUMP	-	-	-	M
62.2	4.1	-	JUMP	OVER	-	-	M
63.2	4.1	-	JUMP	ACROSS	-	-	M
64.2	4.1	-	CROSS	OVER	-	-	P
65.2	4.1	-	JUMP	ACROSS	-	-	M
66.2	4.1	-	PASS	-	-	-	P
68.2	4.1	-	JUMP	OVER	-	-	M
69.2	4.1	-	CROSS	-	-	-	P
71.2	4.1	-	JUMP	OVER	-	-	M
72.2	4.1	-	JUMP	OVER	-	-	M
73.2	4.1	-	SKIP	-	JUMP	OVER	M
76.2	4.1	-	JUMP	OVER	-	-	M
77.2	4.1	-	JUMP	ACROSS	-	-	M
78.2	4.1	-	JUMP	OVER	-	-	M
79.2	4.1	TRY	JUMP	OVER	-	-	M
80.2	4.1	-	JUMP	OVER	-	-	M
81.2	4.1	-	JUMP	TO	-	-	M
82.2	4.1	NEED TO	JUMP	OVER	-	-	M
83.2	4.1	-	LEAP	ACROSS	-	-	M
84.2	4.1	-	CROSS	-	-	-	P
85.2	4.1	-	GO	THROUGH	-	-	A
86.2	4.1	-	?	-	-	-	?
87.2	4.1	-	CROSS	-	JUMP	OVER	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	4.1	TRY	JUMP	-	-	-	M
22.1	4.1	TRY	CROSS	-	-	-	P
23.1	4.1	-	JUMP	OVER	-	-	M
24.1	4.1	-	JUMP	-	-	-	M
25.1	4.1	-	JUMP	OVER	-	-	M
26.1	4.1	-	JUMP	OVER	-	-	M
27.1	4.1	-	CROSS	-	-	-	M
28.1	4.1	-	JUMP	-	PASS	-	M
30.1	4.1	-	CROSS	-	-	-	P
31.1	4.1	-	GO	ACROSS	-	-	A
32.1	4.1	-	JUMP	-	CROSS	-	M
33.1	4.1	-	CROSS	-	-	-	P
34.1	4.1	-	JUMP	-	-	-	M
35.1	4.1	-	JUMP	TO	-	-	M
36.1	4.1	-	GO	ON	-	-	A
38.1	4.1	-	STEP?	-	-	-	M
39.1	4.1	-	JUMP	-	-	-	M
40.1	4.1	TRY	ESCAPE	-	-	-	P
42.1	4.1	-	JUMP	-	-	-	M
43.1	4.1	-	JUMP	-	-	-	M
45.1	4.1	TRY	JUMP	-	SUCCEED	-	M
46.1	4.1	-	JUMP	-	-	-	M
47.1	4.1	-	JUMP	-	-	-	M
48.1	4.1	WANT	CROSS	-	JUMP	-	P
49.1	4.1	-	JUMP	-	-	-	M
50.1	4.1	-	JUMP	OVER	-	-	M
61.1	4.1	-	JUMP	OVER	-	-	M
62.1	4.1	-	JUMP	OVER	-	-	M
63.1	4.1	-	JUMP	-	-	-	M
64.1	4.1	-	JUMP	-	-	-	M
65.1	4.1	-	JUMP	-	-	-	M
66.1	4.1	-	JUMP	OVER	-	-	M
67.1	4.1	-	JUMP	-	-	-	M
68.1	4.1	-	JUMP	-	-	-	M
69.1	4.1	HAVE TO	JUMP	-	-	-	M
70.1	4.1	-	JUMP	OVER	-	-	M
71.1	4.1	TRY	JUMP	-	-	-	M
72.1	4.1	-	JUMP	-	-	-	M
73.1	4.1	-	CROSS	-	-	-	P
74.1	4.1	HAVE TO	JUMP	-	-	-	M
75.1	4.1	-	JUMP	-	-	-	M
81.1	4.1	HAVE TO	CROSS	-	JUMP	-	P
82.1	4.1	DECIDE	JUMP	OVER	-	-	M
83.1	4.1	-	SKIP	-	-	-	M
84.1	4.1	-	JUMP	OVER	-	-	M
85.1	4.1	-	JUMP	OVER	-	-	M
86.1	4.1	TRY	RUN	-	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	4.1	-	JUMP	-	-	-	M
22.2	4.1	-	JUMP	OVER	-	-	M
24.2	4.1	-	JUMP	-	-	-	M
25.2	4.1	-	JUMP	OVER	-	-	M
26.2	4.1	-	JUMP	-	-	-	M
27.2	4.1	-	CROSS	-	-	-	P
28.2	4.1	-	JUMP	TOWARDS	-	-	M
29.2	4.1	-	JUMP	OVER	-	-	M
30.2	4.1	-	JUMP	OVER	-	-	M
31.2	4.1	-	GO	PAST	-	-	A
33.2	4.1	-	JUMP	TO	-	-	M
34.2	4.1	-	JUMP	OVER	-	-	P
35.2	4.1	-	CROSS	-	JUMP	-	P
36.2	4.1	-	CROSS	-	-	-	P
37.2	4.1	-	JUMP	-	-	-	M
38.2	4.1	-	JUMP	-	-	-	M
39.2	4.1	-	JUMP	OVER	-	-	M
40.2	4.1	-	JUMP	INTO	-	-	M
41.2	4.1	-	JUMP	-	-	-	M
42.2	4.1	-	JUMP	OVER	-	-	M
43.2	4.1	-	JUMP	-	-	-	M
44.2	4.1	-	JUMP	-	-	-	M
45.2	4.1	TRY	JUMP	-	MANAGE	-	M
46.2	4.1	-	JUMP	-	-	-	M
47.2	4.1	-	JUMP	-	-	-	M
48.2	4.1	-	JUMP	ACROSS	-	-	M
49.2	4.1	-	JUMP	-	-	-	M
50.2	4.1	-	JUMP	OVER	-	-	M
51.2	4.1	-	JUMP	-	-	-	M
61.2	4.1	-	JUMP	OVER	-	-	M
65.2	4.1	-	JUMP	-	CROSS	-	M
66.2	4.1	-	JUMP	OVER	-	-	M
67.2	4.1	-	CROSS	-	-	-	P
68.2	4.1	-	JUMP	-	-	-	M
69.2	4.1	-	JUMP	OVER	-	-	M
70.2	4.1	-	CLIMB	OVER	-	-	M
71.2	4.1	-	JUMP	-	-	-	M
72.2	4.1	-	CROSS	OVER	-	-	P
73.2	4.1	-	CROSS	-	-	-	P
74.2	4.1	HAVE TO	JUMP	-	-	-	M
75.2	4.1	-	JUMP	OVER	-	-	M
78.2	4.1	-	JUMP	OVER	-	-	M
79.2	4.1	-	JUMP	OVER	-	-	M
81.2	4.1	-	JUMP	OVER	-	-	M
83.2	4.1	-	JUMP	-	-	-	M
84.2	4.1	-	JUMP	OVER	-	-	M
87.2	4.1	HAVE TO	CROSS	-	JUMP	OVER	P

(5) and TOOK a narrow path into the bush

N A T I V E S P E A K E R S

MT 101 05.took narrow path
102 05.came towards lane..went up it
103 05.went to narrow path
104 05.go into bush
105 05.going up narrow road
106 05.walked up path
107 05.took up path
108 05.got to bushes
109 05.walked through

MT 201 05.walked on
202 05.?saw bushes
203 05.went over -?-
204 05.kept on walking
205 05.?
206 05.took the path
207 05.walks along
208 05.found..opening..walked up it
209 05.walk along
210 05.went up path through bushes
211 05.walked along path
212 05.took path into bush
213 05.took a path..went to path
214 05.kept taking other path
215 05.started walking
216 05.kept on walking along main road
217 05.(didn't know) took this(path)
218 05.took narrow path
219 05.followed...followed up path
220 05.used a small path
221 05.walked up another pathway
222 05.walking up....
223 05.came along path
224 05.went into short path

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	5.0	-	GO	ON	-	-	A
33.1	5.0	-	CONTINUE	-	-	-	T
34.1	5.0	-	CONTINUE	-	-	-	T
35.1	5.0	-	TAKE	-	-	-	P
36.1	5.0	-	FOLLOW	-	-	-	P
37.1	5.0	-	WALK	-	-	-	M
38.1	5.0	-	TAKE	-	-	-	P
39.1	5.0	-	TAKE	-	-	-	P
40.1	5.0	-	FOLLOW	-	-	-	P
41.1	5.0	-	FOLLOW	-	-	-	P
42.1	5.0	-	GET	ON WAY	-	-	A
48.1	5.0	-	GO	AWAY	-	-	A
49.1	5.0	-	FOLLOW	-	-	-	P
50.1	5.0	-	GO	-	-	-	A
51.1	5.0	-	GO	ON	-	-	A
54.1	5.0	-	FOLLOW	-	-	-	P
55.1	5.0	-	PASS	THROUGH	-	-	P
56.1	5.0	-	PASS	-	-	-	P
57.1	5.0	-	PASS	-	-	-	P
58.1	5.0	CONTINUE	WALK	-	-	-	M
61.1	5.0	-	TAKE	-	-	-	P
62.1	5.0	-	TAKE	-	-	-	P
64.1	5.0	-	GET	ON	-	-	A
67.1	5.0	-	CONTINUE	-	-	-	T
68.1	5.0	START	FOLLOW	-	-	-	P
69.1	5.0	-	FOLLOW	-	-	-	P
70.1	5.0	DECIDE	TAKE	-	-	-	P
71.1	5.0	-	TAKE	-	-	-	P
72.1	5.0	-	GO	ON	MOVE	CLOSE TO	A
74.1	5.0	-	WALK	HURRIEDLY	-	-	M
75.1	5.0	-	GO	ON	WALK	-	A
76.1	5.0	-	TAKE	-	-	-	P
77.1	5.0	-	CONTINUE	-	-	-	T
78.1	5.0	-	CONTINUE	-	WALK	-	T
79.1	5.0	-	GO	-	-	-	A
80.1	5.0	START	FOLLOW	-	-	-	P
81.1	5.0	-	GO	-	-	-	A
82.1	5.0	START	WALK	SLOWLY	-	-	M
84.1	5.0	-	FOLLOW	-	-	-	P
85.1	5.0	-	PROCEED	-	FOLLOW	-	X
86.1	5.0	-	WALK	-	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	5.0	-	FOLLOW	-	-	-	P
33.2	5.0	-	CONTINUE	-	-	-	T
34.2	5.0	CONTINUE	WALK	-	-	-	M
35.2	5.0	CONTINUE	WALK	-	-	-	M
36.2	5.0	-	FOLLOW	-	-	-	P
37.2	5.0	-	WALK	THROUGH	-	-	M
39.2	5.0	-	TAKE	-	-	-	P
40.2	5.0	-	FOLLOW	-	TAKE	-	P
41.2	5.0	-	FOLLOW	-	REACH	-	P
42.2	5.0	-	WALK	THROUGH	-	-	M
46.2	5.0	-	COME	UP TO	-	-	P
47.2	5.0	TRY	PASS	-	-	-	P
48.2	5.0	-	WALK	TO	-	-	M
51.2	5.0	-	FOLLOW	-	-	-	P
53.2	5.0	-	WALK	BRISKLY	-	-	M
54.2	5.0	-	FALL	DOWN	STAND	UP	P
55.2	5.0	-	COME	TO	-	-	P
56.2	5.0	-	PASS	THROUGH	-	-	P
57.2	5.0	-	FOLLOW	-	-	-	P
58.2	5.0	CONTINUE	WALK	-	-	-	M
61.2	5.0	-	TAKE	-	-	-	P
62.2	5.0	-	WALK	ON AHEAD	-	-	M
63.2	5.0	-	TAKE	-	FOLLOW	-	P
64.2	5.0	-	GO	ON	-	-	A
65.2	5.0	-	FOLLOW	-	-	-	P
66.2	5.0	-	WALK	A BIT	-	-	M
67.2	5.0	-	TAKE	UP	-	-	P
68.2	5.0	-	MOVE	TO	HAVE.FOLLO	-	A
69.2	5.0	-	WALK	ALONG	-	-	M
71.2	5.0	-	FOLLOW	-	-	-	P
72.2	5.0	-	WALK	VERY FAST	-	-	M
73.2	5.0	-	FIND	-	-	-	P
74.2	5.0	-	FOLLOW	-	-	-	P
75.2	5.0	-	TAKE	-	-	-	P
76.2	5.0	-	WALK	-	DESCEND	INTO	M
77.2	5.0	-	WALK	-	-	-	M
78.2	5.0	-	GO	ON	-	-	A
79.2	5.0	-	WALK	-	-	-	M
80.2	5.0	-	WALK	TO	-	-	M
81.2	5.0	-	TRAVEL	-	-	-	A
82.2	5.0	-	GO	ON	WALK	-	A
83.2	5.0	-	CONTINUE	-	-	-	T
84.2	5.0	-	WALK	-	REACH	IN	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	5.0	-	PASS	-	-	-	P
22.1	5.0	-	GO	THROUGH	-	-	A
23.1	5.0	-	FOLLOW	-	-	-	P
24.1	5.0	-	REACH	-	ENTER	-	P
25.1	5.0	-	GO	TO	-	-	A
26.1	5.0	-	PASS	TO	-	-	P
29.1	5.0	-	WALK	-	-	-	M
31.1	5.0	-	CONTINUE	-	-	-	T
32.1	5.0	CONTINUE	GO	-	-	-	A
33.1	5.0	-	GO	-	-	-	A
34.1	5.0	DECIDE	FOLLOW	-	-	-	P
35.1	5.0	-	FOLLOW	-	-	-	P
36.1	5.0	-	FOLLOW	-	-	-	P
37.1	5.0	-	CONTINUE	-	-	-	T
38.1	5.0	-	FOLLOW	-	-	-	P
39.1	5.0	-	WALK	UP	-	-	M
40.1	5.0	-	COME	ACROSS	-	-	P
42.1	5.0	-	DIVERGE	-	-	-	P
44.1	5.0	-	REACH	-	-	-	P
45.1	5.0	-	CLIMB	-	-	-	M
46.1	5.0	-	TAKE	-	-	-	X
61.1	5.0	-	FOLLOW	-	-	-	P
62.1	5.0	-	FOLLOW	-	-	-	P
63.1	5.0	-	GO	ON	-	-	A
64.1	5.0	-	FOLLOW	-	-	-	P
65.1	5.0	-	WALK	-	-	-	M
66.1	5.0	CONTINUE	GO	-	-	-	A
67.1	5.0	START	WALK	SLOWLY	-	-	M
68.1	5.0	-	WALK	THROUGH	-	INTO	M
69.1	5.0	-	CONTINUE	-	-	-	T
70.1	5.0	-	TAKE	-	CONTINUE	-	P
72.1	5.0	-	GO	THROUGH	-	-	A
73.1	5.0	-	WALK	INTO	-	-	M
74.1	5.0	-	TAKE	-	-	-	X
75.1	5.0	-	MEET	-	-	-	X
76.1	5.0	-	FOLLOW	-	-	-	P
77.1	5.0	-	FOLLOW	-	-	-	P
78.1	5.0	-	GO	-	-	-	A
81.1	5.0	-	WALK	ON	-	-	M
82.1	5.0	-	WALK	THROUGH	-	-	M
83.1	5.0	-	GO	AHEAD	FOLLOW	-	A
84.1	5.0	-	TAKE	-	-	-	X
85.1	5.0	-	GET	-	-	-	A

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	5.0	-	REACH	TO	-	-	P
22.2	5.0	-	FOLLOW	-	-	-	P
23.2	5.0	-	FOLLOW	-	-	-	P
24.2	5.0	-	GO	-	-	-	A
25.2	5.0	-	LEAVE	-	-	-	P
27.2	5.0	-	PASS	THROUGH	-	-	P
28.2	5.0	-	FOLLOW	-	-	-	P
29.2	5.0	-	MOVE	ALONG	-	-	A
31.2	5.0	-	GO	TO	-	-	A
32.2	5.0	CONTINUE	WALK	-	-	-	M
33.2	5.0	-	FOLLOW	-	-	-	P
34.2	5.0	DECIDE	FOLLOW	-	-	-	P
35.2	5.0	-	TAKE	-	-	-	X
36.2	5.0	-	FOLLOW	-	-	-	P
37.2	5.0	-	GO	ON	WALK	-	A
38.2	5.0	-	FOLLOW	-	-	-	P
39.2	5.0	-	WALK	SLOWLY	CLIMB	-	M
40.2	5.0	-	COME	ACROSS	-	-	P
41.2	5.0	-	CONTINUE	-	-	-	T
42.2	5.0	-	TAKE	-	-	-	X
43.2	5.0	-	REACH	TO	-	-	P
44.2	5.0	-	CLIMB	-	-	-	M
45.2	5.0	-	FOLLOW	-	-	-	P
46.2	5.0	-	PASS	THROUGH	-	-	P
61.2	5.0	DECIDE	FOLLOW	-	-	-	P
62.2	5.0	-	FOLLOW	-	-	-	P
63.2	5.0	-	FOLLOW	-	-	-	P
64.2	5.0	-	FOLLOW	-	-	-	P
65.2	5.0	-	COME	INTO	WALK	THROUGH	P
66.2	5.0	-	CONTINUE	-	-	-	T
68.2	5.0	-	GO	THROUGH	-	-	A
69.2	5.0	-	CONTINUE	-	-	-	T
71.2	5.0	-	GO	ON	-	-	A
72.2	5.0	-	GO	ON THROUGH	-	-	A
73.2	5.0	-	WALK	INTO	-	-	M
76.2	5.0	-	FOLLOW	-	-	-	P
77.2	5.0	-	GO	SLOWLY	-	-	A
78.2	5.0	-	GO	-	-	-	A
79.2	5.0	-	PASS	THROUGH	-	-	P
80.2	5.0	-	FOLLOW	-	-	-	P
81.2	5.0	-	TAKE	?	-	-	P
82.2	5.0	-	GO	TOWARDS	-	-	A
83.2	5.0	-	TAKE	-	-	-	X
84.2	5.0	-	FOLLOW	-	-	-	P
85.2	5.0	-	GO	THROUGH	-	-	A
86.2	5.0	-	?	-	-	-	?
87.2	5.0	-	GO	ALONG	-	-	A
88.2	5.0	DECIDE	GO	BACK	-	-	A

OLUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	5.0	START	FOLLOW	-	-	-	P
22.1	5.0	-	CONTINUE	-	-	-	T
23.1	5.0	-	GO	ON	-	-	A
24.1	5.0	-	REACH	AT	WALK	-	P
25.1	5.0	-	PASS	-	-	-	P
26.1	5.0	START	GO	-	-	-	A
27.1	5.0	START	WALK	-	-	-	M
28.1	5.0	-	FOLLOW	-	-	-	P
30.1	5.0	-	GO	TOWARDS	-	-	A
31.1	5.0	-	CONTINUE	-	-	-	T
32.1	5.0	-	FOLLOW	-	-	-	P
34.1	5.0	-	FOLLOW	-	-	-	P
36.1	5.0	-	?	-	FOLLOW	-	?
37.1	5.0	-	PASS	-	-	-	P
38.1	5.0	-	GO	ON	-	-	A
39.1	5.0	-	GO	ON	-	-	A
40.1	5.0	-	CONTINUE	-	-	-	T
41.1	5.0	-	FOLLOW	-	-	-	P
42.1	5.0	-	FOLLOW	-	-	-	P
43.1	5.0	START	GO	-	-	-	A
45.1	5.0	-	FOLLOW	-	-	-	P
46.1	5.0	-	CONTINUE	-	-	-	T
47.1	5.0	-	CONTINUE	-	-	-	T
49.1	5.0	-	GO	ON	-	-	A
50.1	5.0	-	FOLLOW	-	-	-	P
51.1	5.0	-	GO	ON AND ON	-	-	A
61.1	5.0	-	GO	-	-	-	A
62.1	5.0	-	CONTINUE	-	-	-	T
63.1	5.0	-	WALK	OVER	-	-	M
64.1	5.0	-	FOLLOW	-	-	-	P
65.1	5.0	-	GET	ON TO	-	-	A
66.1	5.0	-	TAKE	-	-	-	X
68.1	5.0	-	CONTINUE	-	-	-	T
69.1	5.0	-	GO	-	FIND..PASS	-	A
70.1	5.0	-	FOLLOW	-	-	-	P
71.1	5.0	-	FOLLOW	-	-	-	P
72.1	5.0	-	GO	-	-	-	A
73.1	5.0	-	TREK	-	-	-	M
74.1	5.0	-	CONTINUE	-	-	-	T
75.1	5.0	-	CROSS	-	-	-	P
81.1	5.0	-	USE	-	-	-	X
82.1	5.0	-	WALK	ALONG	-	-	M
83.1	5.0	-	FOLLOW	-	-	-	P
86.1	5.0	-	PROCEED	-	-	-	T

OLUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	5.0	-	CONTINUE	-	-	-	T
22.2	5.0	-	CONTINUE	-	-	-	T
24.2	5.0	-	CONTINUE	-	-	-	T
25.2	5.0	START	WALK	-	-	-	M
26.2	5.0	-	FOLLOW	-	-	-	P
27.2	5.0	-	WALK	TO	-	-	M
28.2	5.0	-	FOLLOW	-	-	-	P
29.2	5.0	-	GO	TO	-	-	A
30.2	5.0	-	WALK	ALONG	-	-	M
31.2	5.0	-	CONTINUE	-	-	-	T
33.2	5.0	-	GO	-	WALK	SLOWLY	A
34.2	5.0	-	FOLLOW	-	-	-	P
35.2	5.0	-	TAKE	-	-	-	P
36.2	5.0	-	FOLLOW	-	-	-	P
37.2	5.0	-	FOLLOW	-	-	-	P
38.2	5.0	-	FOLLOW	-	-	-	P
39.2	5.0	-	FOLLOW	-	-	-	P
40.2	5.0	START	WALK	-	-	-	M
42.2	5.0	-	WALK	ALONG	-	-	M
43.2	5.0	-	COME	TO	START GO	-	P
44.2	5.0	-	FOLLOW	-	-	-	P
45.2	5.0	-	FOLLOW	-	-	-	P
46.2	5.0	-	FOLLOW	-	-	-	P
47.2	5.0	-	CONTINUE	-	-	-	T
48.2	5.0	-	GO	-	-	-	A
49.2	5.0	-	GET	INTO	FOLLOW	-	A
50.2	5.0	-	WALK	-	GO	AHEAD	M
51.2	5.0	-	GO	ON AND ON	-	-	A
61.2	5.0	-	MOVE	SLOWLY	-	-	A
63.2	5.0	-	GO	ALONG	-	-	A
65.2	5.0	-	FOLLOW	-	-	-	P
66.2	5.0	-	TAKE	-	-	-	P
67.2	5.0	-	WALK	-	-	-	M
69.2	5.0	-	COME	AT	CLIMB	-	P
70.2	5.0	-	TAKE	-	-	-	P
71.2	5.0	-	FOLLOW	-	-	-	P
72.2	5.0	-	REACH	AT	-	-	P
73.2	5.0	-	TREK	ON	-	-	M
74.2	5.0	-	CONTINUE	-	-	-	T
75.2	5.0	-	TAKE	-	-	-	P
78.2	5.0	START	WALK	SLOWLY	-	-	M
79.2	5.0	-	ENTER	-	-	-	P
81.2	5.0	-	FOLLOW	-	-	-	P
82.2	5.0	-	GO	ALONG	WALK	-	A
83.2	5.0	-	FOLLOW	-	-	-	P
84.2	5.0	-	CONTINUE	-	-	-	T

(6)- He soon REACHED the small market Otieno had mentioned

N A T I V E S P E A K E R S

MT	101	06.came to small market
	102	06.came towards market
	103	06.see
	104	06.came up to village
	105	06.went into town
	106	06.came into little village
	107	06.-
	108	06.coming in to market
	109	06.came to market
MT	201	06.came to the market
	202	06.saw shops
	203	06.came to road (?)
	204	06.came to market
	205	06.walking
	206	06.saw the market
	207	06.comes to
	208	06.found hissel' in...big place
	209	06.came to a village
	210	06.came to market
	211	06.saw a market
	212	06.came to a market
	213	06.- [LONG PAUSE]
	214	06.came to shops
	215	06.-
	216	06.came to some shops
	217	06.walking on path
	218	06.came to market
	219	06.came to market
	220	06.passed up to village
	221	06.walked in between two houses
	222	06. (....to town)
	223	06.reached a market
	224	06.came to village

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	6.0	-	REACH	AT	-	-	P
33.1	6.0	-	PASS	NEAR BY	-	-	P
34.1	6.0	-	REACH	IN	-	-	P
35.1	6.0	-	COME	TO	-	-	P
36.1	6.0	-	GO	-	-	-	A
37.1	6.0	-	APPROACH	-	-	-	P
38.1	6.0	-	GET	ON	-	-	A
39.1	6.0	-	REACH	-	-	-	P
41.1	6.0	-	REACH	-	-	-	P
42.1	6.0	-	APPROACH	-	-	-	P
46.1	6.0	-	GO	PAST	-	-	A
47.1	6.0	-	GO	TO	-	-	A
48.1	6.0	-	REACH	AT	-	-	P
49.1	6.0	-	GO	TO	-	-	A
50.1	6.0	-	PASS	THROUGH	-	-	P
51.1	6.0	-	COME	TO	-	-	P
53.1	6.0	-	RUN	-	PASS	NEAR	M
54.1	6.0	-	REACH	AT	-	-	P
55.1	6.0	-	REACH	TO	-	-	P
58.1	6.0	-	PASS	-	-	-	P
61.1	6.0	-	COME	ACROSS	-	-	P
62.1	6.0	-	REACH	INTO	-	-	P
63.1	6.0	-	FIND	-	-	-	P
64.1	6.0	-	REACH	-	-	-	P
66.1	6.0	-	WALK	TOWARDS	REACH	-	M
67.1	6.0	-	REACH	-	-	-	P
68.1	6.0	-	REACH	-	-	-	P
69.1	6.0	-	REACH	AT	-	-	P
71.1	6.0	-	PASS	IN BETWEEN	-	-	P
72.1	6.0	-	GO	ON	-	-	A
74.1	6.0	-	REACH	-	-	-	P
75.1	6.0	-	REACH	-	-	-	P
76.1	6.0	-	GO	TO	-	-	A
77.1	6.0	-	REACH	-	-	-	P
78.1	6.0	-	COME	TO	-	-	P
79.1	6.0	-	PASS	BETWEEN	-	-	P
80.1	6.0	-	REACH	-	-	-	P
81.1	6.0	-	REACH	-	-	-	P
82.1	6.0	-	GO	-	COME	ACROSS	A
85.1	6.0	HAVE TO	GO	INTO	-	-	A
86.1	6.0	-	GET	TO	-	-	A

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	6.0	-	REACH	AT	-	-	P
33.2	6.0	-	REACH	TO	-	-	P
34.2	6.0	-	REACH	TO	-	-	P
35.2	6.0	-	COME	ON	-	-	P
36.2	6.0	-	GO	UP TO	-	-	A
37.2	6.0	-	REACH	-	-	-	P
38.2	6.0	-	REACH	-	-	-	P
39.2	6.0	-	COME	TO	-	-	P
42.2	6.0	-	REACH	-	-	-	P
47.2	6.0	-	REACH	-	-	-	P
48.2	6.0	-	WALK	INTO	-	-	M
49.2	6.0	-	WALK	TO	-	-	M
50.2	6.0	-	GO	PAST	-	-	A
51.2	6.0	-	COME	TO	-	-	P
52.2	6.0	-	REACH	NEAR	-	-	P
53.2	6.0	-	COME	TO	-	-	P
54.2	6.0	-	WALK	TO	-	-	M
55.2	6.0	-	COME	TO	-	-	P
56.2	6.0	-	FIND	-	-	-	P
57.2	6.0	-	COME	TO	-	-	P
58.2	6.0	-	PASS	-	-	-	P
61.2	6.0	-	COME	ACROSS	-	-	P
62.2	6.0	-	REACH	-	-	-	P
64.2	6.0	-	REACH	-	-	-	P
66.2	6.0	-	REACH	-	-	-	P
67.2	6.0	-	REACH	-	-	-	P
68.2	6.0	-	REACH	-	-	-	P
69.2	6.0	-	REACH	-	-	-	P
71.2	6.0	-	PASS	-	-	-	P
72.2	6.0	-	REACH	NEAR	-	-	P
74.2	6.0	-	REACH	-	-	-	P
76.2	6.0	-	COME	TO	-	-	P
77.2	6.0	-	REACH	-	-	-	P
78.2	6.0	-	REACH	-	-	-	P
79.2	6.0	-	PASS	NEAR	-	-	P
80.2	6.0	-	WALK	TOWARDS	-	-	M
81.2	6.0	-	REACH	-	-	-	P
82.2	6.0	-	GO	-	COME	ACROSS	A
83.2	6.0	-	COME	ACROSS	-	-	P
84.2	6.0	-	REACH	-	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	6.0	-	REACH	-	-	-	P
22.1	6.0	-	REACH	-	-	-	P
23.1	6.0	-	REACH	AT	-	-	P
24.1	6.0	-	REACH	-	-	-	P
25.1	6.0	-	PASS	THROUGH	-	-	P
28.1	6.0	-	REACH	-	-	-	P
29.1	6.0	-	SEE	-	-	-	X
30.1	6.0	-	REACH	-	-	-	P
31.1	6.0	-	REACH	-	-	-	P
32.1	6.0	-	REACH	-	-	-	P
33.1	6.0	-	GO	TO	-	-	A
34.1	6.0	-	REACH	-	-	-	P
35.1	6.0	-	FIND	-	-	-	P
36.1	6.0	-	REACH	-	-	-	P
37.1	6.0	-	GO	-	-	-	A
38.1	6.0	-	ENTER	-	-	-	P
39.1	6.0	-	PASS	-	-	-	P
40.1	6.0	-	COME	PAST	-	-	P
41.1	6.0	-	PASS	THROUGH	-	-	P
42.1	6.0	-	GO	UP TO	-	-	A
43.1	6.0	-	PASS	TO	-	-	P
44.1	6.0	-	APPROACH	-	-	-	P
45.1	6.0	-	PASS	-	-	-	P
46.1	6.0	-	REACH	AT	-	-	P
61.1	6.0	-	APPROACH	-	-	-	P
62.1	6.0	-	REACH	-	-	-	P
63.1	6.0	-	REACH	-	-	-	P
64.1	6.0	-	REACH	-	-	-	P
65.1	6.0	-	COME	ACROSS	-	-	P
66.1	6.0	-	REACH	-	-	-	P
67.1	6.0	-	REACH	-	-	-	P
69.1	6.0	-	APPROACH	-	-	-	P
70.1	6.0	-	ARRIVE	AT	-	-	P
71.1	6.0	-	GO	-	PASS	-	A
72.1	6.0	-	GO	TO	-	-	A
73.1	6.0	-	REACH	TO	-	-	P
74.1	6.0	-	REACH	-	-	-	P
75.1	6.0	-	FIND	-	-	-	P
77.1	6.0	-	MEET	-	-	-	X
78.1	6.0	-	REACH	-	-	-	P
79.1	6.0	-	GO	TOWARDS	REACH	-	A
81.1	6.0	-	?	-	-	-	?
82.1	6.0	-	REACH	-	-	-	P
83.1	6.0	-	PASS	-	-	-	P
84.1	6.0	-	GO	TO	-	-	A
85.1	6.0	-	REACH	-	-	-	P
86.1	6.0	-	PASS	-	-	-	P
87.1	6.0	-	PASS	THROUGH	-	-	P
88.1	6.0	-	REACH	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	6.0	-	REACH	-	-	-	P
22.2	6.0	-	REACH	-	-	-	P
23.2	6.0	-	REACH	-	-	-	P
24.2	6.0	-	REACH	ON	-	-	P
25.2	6.0	-	FIND	-	-	-	P
27.2	6.0	-	COME	NEARER	-	-	P
28.2	6.0	-	GO	-	FIND	-	A
29.2	6.0	-	GO	FURTHER	SEE	-	A
30.2	6.0	-	WALK	TOWARDS	-	-	M
31.2	6.0	-	REACH	-	-	-	P
32.2	6.0	-	FIND	-	-	-	P
33.2	6.0	-	REACH	AT	-	-	P
34.2	6.0	-	COME	INTO	-	-	P
35.2	6.0	-	FIND	-	-	-	P
36.2	6.0	-	REACH	NEAR	-	-	P
37.2	6.0	-	WALK	-	-	-	M
38.2	6.0	-	COME	ACROSS	-	-	P
39.2	6.0	-	REACH	-	-	-	P
40.2	6.0	-	COME	TOWARDS	-	-	P
41.2	6.0	-	REACH	-	-	-	P
42.2	6.0	-	MEET	-	-	-	X
43.2	6.0	-	REACH	-	-	-	P
44.2	6.0	-	SEE	-	-	-	X
45.2	6.0	-	GO	UP TO	-	-	A
46.2	6.0	-	GO	TO	-	-	A
61.2	6.0	-	GO	TOWARDS	-	-	A
62.2	6.0	-	REACH	-	-	-	P
64.2	6.0	-	COME	TO	-	-	P
65.2	6.0	-	COME	TO	-	-	P
66.2	6.0	-	REACH	-	-	-	P
68.2	6.0	-	REACH	-	-	-	P
69.2	6.0	-	COME	ACROSS	-	-	P
71.2	6.0	-	FIND	-	-	-	P
72.2	6.0	-	REACH	-	-	-	P
73.2	6.0	-	REACH	-	-	-	P
76.2	6.0	-	REACH	-	-	-	P
77.2	6.0	-	MEET	-	-	-	X
78.2	6.0	-	?	-	-	-	?
79.2	6.0	-	STROLL	OVER	GO	TOWARDS	M
80.2	6.0	-	COME	TO	-	-	P
81.2	6.0	-	COME	-	FIND	-	P
82.2	6.0	MANAGE	REACH	-	-	-	P
83.2	6.0	-	REACH	-	-	-	P
84.2	6.0	-	COME	UPON	-	-	P
85.2	6.0	-	GO	TO	-	-	A
86.2	6.0	-	REACH	-	-	-	P
87.2	6.0	-	REACH	-	-	-	P
88.2	6.0	-	REACH	TO	-	-	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	6.0	-	REACH	AT	-	-	P
23.1	6.0	-	REACH	-	-	-	P
24.1	6.0	-	PASS	-	-	-	P
25.1	6.0	-	GO	TO	-	-	A
26.1	6.0	-	REACH	-	-	-	P
27.1	6.0	-	GO	INTO	-	-	A
28.1	6.0	-	REACH	-	-	-	P
30.1	6.0	-	REACH	-	-	-	P
33.1	6.0	-	REACH	NEAR	-	-	P
34.1	6.0	-	COME	-	FIND	-	P
35.1	6.0	-	MOVE	TO	-	-	A
36.1	6.0	-	REACH	AT	-	-	P
37.1	6.0	-	PASS	THROUGH	-	-	P
38.1	6.0	-	GO	-	-	-	A
39.1	6.0	-	REACH	-	-	-	P
40.1	6.0	-	PASS	THROUGH	-	-	P
41.1	6.0	-	FOLLOW	BETWEEN	REACH	-	P
42.1	6.0	-	PASS	-	-	-	P
43.1	6.0	-	REACH	-	-	-	P
45.1	6.0	-	GO	THROUGH	-	-	A
46.1	6.0	-	GO	UP TO	REACH	-	A
47.1	6.0	-	REACH	NEAR	-	-	P
48.1	6.0	-	REACH	-	-	-	P
49.1	6.0	-	REACH	TO	-	-	P
50.1	6.0	-	REACH	TO	-	-	P
51.1	6.0	-	REACH	-	-	-	P
61.1	6.0	-	REACH	-	-	-	P
62.1	6.0	-	REACH	-	-	-	P
63.1	6.0	-	COME	NEAR	-	-	P
65.1	6.0	-	REACH	-	-	-	P
67.1	6.0	-	WALK	UP TO	REACH	-	M
68.1	6.0	-	GO	TO	-	-	A
69.1	6.0	-	GO	THROUGH TO	-	-	A
70.1	6.0	-	REACH	-	-	-	P
71.1	6.0	-	REACH	-	-	-	P
72.1	6.0	-	REACH	-	-	-	P
73.1	6.0	-	NEAR	-	-	-	P
74.1	6.0	-	REACH	-	-	-	P
75.1	6.0	-	REACH	AT	-	-	P
81.1	6.0	-	COME	UP TO	-	-	P
82.1	6.0	-	REACH	-	-	-	P
83.1	6.0	-	REACH	-	-	-	P
84.1	6.0	-	REACH	-	-	-	P
85.1	6.0	-	ARRIVE	AT	-	-	P
86.1	6.0	-	REACH	-	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	6.0	-	COME	ACROSS	-	-	P
22.2	6.0	-	REACH	-	-	-	P
24.2	6.0	-	REACH	NEAR	-	-	P
25.2	6.0	-	REACH	NEAR	-	-	P
26.2	6.0	-	REACH	-	-	-	P
27.2	6.0	-	REACH	-	-	-	P
28.2	6.0	-	REACH	-	-	-	P
29.2	6.0	-	WALK	TO	-	-	M
30.2	6.0	-	REACH	-	-	-	P
31.2	6.0	-	REACH	-	-	-	P
33.2	6.0	-	REACH	AT	-	-	P
34.2	6.0	-	REACH	-	-	-	P
35.2	6.0	-	ARRIVE	AT	-	-	P
36.2	6.0	-	COME	NEAR	-	-	P
37.2	6.0	-	ARRIVE	IN	-	-	P
38.2	6.0	-	GO	TO	-	-	A
39.2	6.0	-	REACH	AT	-	-	P
40.2	6.0	-	REACH	AT	-	-	P
41.2	6.0	-	REACH	TO	-	-	P
42.2	6.0	-	REACH	AT	-	-	P
43.2	6.0	-	GO	-	-	-	A
44.2	6.0	-	REACH	-	-	-	P
45.2	6.0	-	GO	UP TO	-	-	A
46.2	6.0	-	COME	TO	-	-	P
47.2	6.0	-	GO	-	FIND	-	A
48.2	6.0	-	REACH	-	-	-	P
49.2	6.0	-	REACH	AT	-	-	P
50.2	6.0	-	REACH	TO	-	-	P
51.2	6.0	-	REACH	AT	-	-	P
61.2	6.0	-	REACH	-	-	-	P
63.2	6.0	-	COME	ACROSS	-	-	P
65.2	6.0	-	REACH	-	-	-	P
67.2	6.0	-	REACH	AT	-	-	P
68.2	6.0	-	REACH	-	-	-	P
69.2	6.0	-	COME	TOWARDS	-	-	P
70.2	6.0	-	REACH	-	-	-	P
71.2	6.0	-	PASS	THROUGH	-	-	P
72.2	6.0	-	REACH	AT	-	-	P
73.2	6.0	-	GO	TOWARDS	-	-	A
74.2	6.0	-	ARRIVE	AT	-	-	P
75.2	6.0	-	REACH	-	-	-	P
78.2	6.0	-	REACH	-	-	-	P
79.2	6.0	-	REACH	-	-	-	P
81.2	6.0	-	REACH	-	-	-	P
82.2	6.0	-	REACH	-	-	-	P
83.2	6.0	-	REACH	-	-	-	P
84.2	6.0	-	REACH	-	-	-	P

(7) Juma....STROLLED ROUND the shops and chatted to a few people

N A T I V E S P E A K E R S

MT 101 07.walked around
102 07.strolled round
103 07.stayed around shops
104 07.walk around shops
105 07.walked around shops
106 07.(talking)
107 07.kept going round
108 07.went into market
109 07.went on to see

MT 201 07.look around.talked..went into
202 07.started looking in & talking
203 07.stayed in town...
204 07.looked in to shops
205 07.?see...shaking hands
206 07.(chatted)
207 07.(meets...chats)
208 07.(started talking) [LONG PAUSE]
209 07.(spoke to some people)
210 07.wandered around looking in
211 07.spoke...looked round shops
212 07.looked around
213 07.-
214 07.looked round
215 07.walked thro' streets speaking
216 07.(talked)
217 07.(met some friends)
218 07.started to wander around shop
219 07.(started to talk)
220 07.strolled round..walked round
221 07.(met)
222 07.walking about the shops
223 07.stood.chatted..had look round
224 07.(time to) look around shops

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
34.1	7.0	CONTINUE	WALK	-	FIND	-	M
41.1	7.0	-	WALK	-	-	-	M
42.1	7.0	-	FIND	-	-	-	P
48.1	7.0	-	REACH	IN	-	-	P
51.1	7.0	-	STOP	-	-	-	T
54.1	7.0	-	WALK	AROUND	-	-	M
62.1	7.0	DECIDE	HAVESTROLL	-	-	-	X
72.1	7.0	-	PASS	INSIDE	-	-	P
73.1	7.0	-	WALK	THROUGH	-	-	M
74.1	7.0	-	WALK	AROUND	-	-	M
75.1	7.0	-	WALK	PAST	-	-	M
77.1	7.0	-	WALK	IN BETWEEN	-	-	M
80.1	7.0	-	WALK	NEAR	-	-	M
81.1	7.0	-	PASS	BETWEEN	-	-	P
84.1	7.0	DECIDE	ROAM	IN	-	-	M
86.1	7.0	-	GO	-	TALK	-	A

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
36.2	7.0	-	WALK	-	-	-	M
39.2	7.0	-	WALK	AROUND	-	-	M
40.2	7.0	-	WALK	AROUND	-	-	M
49.2	7.0	-	GO	INTO	PASS	THROUGH	A
54.2	7.0	-	FIND	-	-	-	P
58.2	7.0	-	GO	PAST	-	-	A
66.2	7.0	-	WALK	AROUND	-	-	M
67.2	7.0	-	STROLL	AROUND	-	-	M
68.2	7.0	HAVE TO	GO	ROUND	-	-	A
69.2	7.0	DECIDE	STROLL	-	-	-	M
72.2	7.0	-	GO	PAST	-	-	A
73.2	7.0	-	WALK	-	-	-	M
74.2	7.0	DECIDE	STROLL	AROUND	-	-	M
76.2	7.0	-	STROLL	AROUND	-	-	M
77.2	7.0	-	GO	IN BETWEEN	-	-	A
78.2	7.0	-	STROLL	A BIT	-	-	M
81.2	7.0	DECIDE	STROLL	IN	-	-	M
82.2	7.0	-	GO	BEHIND	-	-	A
83.2	7.0	START	STALL	A BIT	-	-	M
84.2	7.0	DECIDE	WALK	IN	ROAM	ABOUT	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
23.1	7.0	-	REACH	AT	-	-	P
25.1	7.0	-	PASS	-	-	-	P
28.1	7.0	-	FIND	-	-	-	P
29.1	7.0	-	PASS	ALONG	-	-	P
31.1	7.0	-	FIND	-	-	-	P
34.1	7.0	-	GO	THROUGH	-	-	A
36.1	7.0	-	PASS	THROUGH	-	-	P
37.1	7.0	CONTINUE	CROSS	-	-	-	P
38.1	7.0	-	PASS	-	-	-	P
40.1	7.0	-	PASS	-	-	-	P
45.1	7.0	-	GO	-	MEET	-	A
46.1	7.0	-	FIND	-	-	-	P
61.1	7.0	-	MEET	-	-	-	X
64.1	7.0	-	PASS	-	-	-	P
73.1	7.0	-	PASS	-	-	-	P
75.1	7.0	-	GO	THROUGH	-	-	A
85.1	7.0	-	PASS	-	-	-	P
88.1	7.0	DECIDE	LOITER	IN	-	-	M

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.2	7.0	-	PASS	BY	GO	-	P
23.2	7.0	-	ENTER	-	FIND	-	P
24.2	7.0	-	WALK	ROUND	-	-	M
25.2	7.0	-	PASS	THROUGH	-	-	P
27.2	7.0	-	PASS	-	-	-	P
28.2	7.0	-	REACH	-	FIND	-	P
29.2	7.0	-	PASS	THROUGH	-	-	P
30.2	7.0	-	GO	ALONG	-	-	A
31.2	7.0	-	FIND	-	-	-	P
35.2	7.0	-	GO	AROUND	-	-	A
36.2	7.0	-	PASS	THROUGH	-	-	P
39.2	7.0	-	STROLL	-	-	-	M
40.2	7.0	-	STAY	-	-	-	X
41.2	7.0	START	STROLL	-	-	-	M
45.2	7.0	-	MEET	-	-	-	X
46.2	7.0	-	GO	THROUGH	-	-	A
61.2	7.0	-	FIND	-	-	-	P
62.2	7.0	-	STROLL	AROUND	-	-	M
65.2	7.0	-	STOP	-	-	-	T
69.2	7.0	-	LOITER	AROUND	-	-	M
72.2	7.0	-	STROLL	AROUND	-	-	M
79.2	7.0	-	GO	ROUND	-	-	A
81.2	7.0	DECIDE	STROLL	-	-	-	M
84.2	7.0	DECIDE	GO	ROUND	-	-	A
85.2	7.0	-	PASS	-	-	-	P
86.2	7.0	-	?	-	-	-	?
87.2	7.0	DECIDE	GO	ROUND	-	-	A
88.2	7.0	DECIDE	ROAM	ABOUT	-	-	M

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
23.1	7.0	-	GO	ROUND	-	-	A
24.1	7.0	-	WALK	-	-	-	M
25.1	7.0	-	FIND	-	-	-	P
26.1	7.0	-	FIND	-	-	-	P
28.1	7.0	-	WALK	ROUND	-	-	M
32.1	7.0	-	JOIN	-	-	-	P
35.1	7.0	START	WALK	AROUND	-	-	M
39.1	7.0	-	PASS	BETWEEN	-	-	P
61.1	7.0	-	GO	OVER THRO'	-	-	A
85.1	7.0	-	WALK	ALONG	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	7.0	-	GO	IN	-	-	A
25.2	7.0	START	WALK	-	-	-	M
29.2	7.0	-	GO	ON	-	-	A
31.2	7.0	-	STROLL	-	-	-	M
34.2	7.0	-	WALK	AROUND	-	-	M
35.2	7.0	-	GO	ROUND TO	-	-	A
37.2	7.0	-	WALK	SLOWLY	-	-	M
39.2	7.0	-	LOITER	AROUND	-	-	M
41.2	7.0	-	FOLLOW	INFRONTOF	-	-	P
42.2	7.0	-	STROLL	-	-	-	M
45.2	7.0	-	GO	TO	-	-	A
47.2	7.0	-	PASS	NEAR BY	-	-	P
51.2	7.0	-	PASS	-	-	-	P
65.2	7.0	-	GO	ROUND	-	-	A
66.2	7.0	-	WALK	AROUND	-	-	M
67.2	7.0	-	GO	-	TALK	-	A
70.2	7.0	START	STROLL	AROUND	-	-	M
72.2	7.0	-	STROLL	AROUND	-	-	M
78.2	7.0	START	WALK	AROUND	-	-	M
79.2	7.0	START	WANDER	-	-	-	M
81.2	7.0	-	STAY	AROUND	-	-	T
82.2	7.0	DECIDE	WALK	AROUND	-	-	M
83.2	7.0	-	WALK	AROUND	-	-	M
87.2	7.0	-	WALK	AROUND	-	-	M

(8) Then he saw a crowd....and he WANDERED OVER to listen for a while

N A T I V E S P E A K E R S

MT 101 08.went up to see
102 08.came over...got in
103 08.went to see
104 08.walked over
105 08.came to
106 08.decided to go over
107 08.walking up...see...stopped
108 08.(saw)
109 08.went up to see

MT 201 08.went on..came to..stopped
202 08.walked over
203 08.went and listened
204 08.waited for while
205 08.walked on..see...went up to
206 08.saw...decided to listen
207 08.walks along..finds..stopped
208 08.-
209 08.see...stopped to listen
210 08.saw crowd...stood there
211 08.saw crowd
212 08.moved on..saw..went over
213 08.-
214 08.walked on..saw a choir
215 08.went to listen
216 08.went up to listen
217 08.went over
218 08.went to have a look
219 08.went up to listen
220 08.(saw...listened)
221 08.going up a hill
222 08.went over to listen
223 08.wandered over to see
224 08.wandered over

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	8.0	-	SEE	-	DECIDEJOIN	-	X
34.2	8.0	-	FIND	-	-	-	P
35.2	8.0	-	JOIN	-	-	-	P
36.2	8.0	-	GO	-	-	-	A
37.2	8.0	-	GO	FORWARD	-	-	A
38.2	8.0	-	ATTEND	-	-	-	X
39.2	8.0	-	COME	TO	-	-	P
40.2	8.0	-	GO	-	-	-	A
41.2	8.0	TRY	GO	-	-	-	A
46.2	8.0	-	GO	TO	-	-	A
47.2	8.0	-	?	-	-	-	?
48.2	8.0	-	GO	NEAR	-	-	A
49.2	8.0	-	JOIN	-	-	-	P
50.2	8.0	-	GO	-	JOIN	-	A
51.2	8.0	-	COME	ACROSS	-	-	P
52.2	8.0	-	GO	TO	-	-	A
53.2	8.0	DECIDE	GO	-	-	-	A
54.2	8.0	DECIDE	GO	-	SHARE	-	A
55.2	8.0	-	COME	-	-	-	P
56.2	8.0	-	GO	-	SEE	-	A
57.2	8.0	DECIDE	GO	-	HEAR	-	A
58.2	8.0	-	FIND	-	JOIN	-	P
61.2	8.0	-	GO	-	LISTEN	-	A
62.2	8.0	DECIDE	GO	-	HEAR	-	A
63.2	8.0	-	JOIN	-	-	-	P
64.2	8.0	DECIDE	GO	ALONG	-	-	A
65.2	8.0	-	JOIN	-	-	-	P
66.2	8.0	DECIDE	JOIN	-	-	-	P
67.2	8.0	DECIDE	JOIN	-	-	-	P
68.2	8.0	-	REACH	TO	-	-	P
69.2	8.0	-	REACH	NEAR	-	-	P
71.2	8.0	-	GO	INSIDE	-	-	A
72.2	8.0	-	JOIN	-	-	-	P
73.2	8.0	-	COME	INTO	-	-	P
74.2	8.0	DECIDE	GO	THERE	-	-	A
75.2	8.0	-	GO	-	JOIN	-	A
76.2	8.0	DECIDE	JOIN	-	-	-	P
77.2	8.0	-	JOIN	-	-	-	P
78.2	8.0	-	REACH	-	STAND	-	P
79.2	8.0	-	STOP	-	-	-	T
80.2	8.0	-	REACH	-	JOIN	-	P
81.2	8.0	-	JOIN	-	-	-	P
82.2	8.0	-	COME	TO	-	-	P
83.2	8.0	-	COME	ACROSS	-	-	P
84.2	8.0	DECIDE	WALK?	-	LISTEN	-	M

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	8.0	-	REACH	-	JOIN	-	P
34.1	8.0	-	FIND	-	-	-	P
35.1	8.0	DECIDE	GO	-	JOIN	-	A
37.1	8.0	-	GO	-	-	-	A
38.1	8.0	-	ENTER	-	-	-	P
39.1	8.0	-	GO	-	-	-	A
40.1	8.0	DECIDE	GO	-	-	-	A
41.1	8.0	DECIDE	GO	-	HURRY	-	A
46.1	8.0	-	GO	TO	-	-	A
48.1	8.0	DECIDE	GO	THERE	-	-	A
50.1	8.0	-	FIND	-	-	-	P
51.1	8.0	-	COME	ACROSS	JOIN	-	P
53.1	8.0	DECIDE	JOIN	-	-	-	P
54.1	8.0	DECIDE	GO	-	HEAR	-	A
56.1	8.0	-	GO	-	HEAR	-	A
57.1	8.0	-	GO	-	LISTEN	-	A
58.1	8.0	-	GET	-	-	-	A
61.1	8.0	-	GO	-	JOIN	-	A
62.1	8.0	DECIDE	GO	-	LISTEN	-	A
63.1	8.0	-	RUN	-	-	-	M
64.1	8.0	DECIDE	CALL?	-	-	-	X
66.1	8.0	-	GO	-	LISTEN	-	A
67.1	8.0	-	REACH	-	-	-	P
68.1	8.0	-	JOIN	-	-	-	P
69.1	8.0	-	JOIN	-	-	-	P
70.1	8.0	-	JOIN	-	-	-	P
71.1	8.0	-	JOIN	-	-	-	P
72.1	8.0	-	GO	ON	FIND	-	A
73.1	8.0	-	GO	-	-	-	A
74.1	8.0	DECIDE	GO	-	-	-	A
75.1	8.0	DECIDE	JOIN	-	-	-	P
76.1	8.0	-	JOIN	-	-	-	P
77.1	8.0	-	GO	ON	-	-	A
78.1	8.0	-	COME	TO	JOIN	-	P
79.1	8.0	DECIDE	GO	-	-	-	A
80.1	8.0	-	RUN	-	JOIN	-	M
81.1	8.0	DECIDE	STOP	-	JOIN	-	T
82.1	8.0	-	COME	ACROSS	JOIN	-	P
83.1	8.0	-	JOIN	-	-	-	P
85.1	8.0	DECIDE	JOIN	-	-	-	P
86.1	8.0	DECIDE	JOIN	-	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	8.0	-	GO	-	-	-	A
23.1	8.0	-	RUN	-	-	-	M
24.1	8.0	-	GO	-	-	-	A
25.1	8.0	-	GO	-	-	-	A
28.1	8.0	-	FIND	-	-	-	P
29.1	8.0	-	GO	-	-	-	A
30.1	8.0	DECIDE	PASS	-	-	-	P
31.1	8.0	-	FIND	-	-	-	P
32.1	8.0	-	GO	-	-	-	A
33.1	8.0	DECIDE	GO	-	JOIN	-	A
34.1	8.0	DECIDE	GO	-	-	-	A
35.1	8.0	-	FIND	-	JOIN	-	P
37.1	8.0	-	GO	-	-	-	A
38.1	8.0	-	JOIN	-	-	-	P
39.1	8.0	-	GO	-	-	-	A
40.1	8.0	-	ENTER	-	-	-	P
41.1	8.0	-	JOIN	-	-	-	P
42.1	8.0	-	GO	-	-	-	A
43.1	8.0	DECIDE	JOIN	-	-	-	P
44.1	8.0	-	MOVE	TO	-	-	A
45.1	8.0	-	GO	-	MEET	-	A
61.1	8.0	DECIDE	GO	-	-	-	A
62.1	8.0	DECIDE	JOIN	-	-	-	P
63.1	8.0	-	GO	-	-	-	A
64.1	8.0	-	MEET	-	-	-	X
65.1	8.0	DECIDE	JOIN	-	-	-	P
66.1	8.0	-	JOIN	-	-	-	P
67.1	8.0	-	GO	-	-	-	A
68.1	8.0	-	MEET	-	-	-	X
69.1	8.0	-	MEET	-	-	-	X
70.1	8.0	-	REACH	-	-	-	P
71.1	8.0	DECIDE	PASS	-	-	-	P
72.1	8.0	-	GO	-	-	-	A
73.1	8.0	-	GO	-	-	-	A
74.1	8.0	-	SEE	-	ATTEND	-	X
75.1	8.0	-	SEE	-	MEET	-	X
76.1	8.0	-	GO	ALONG	MEET	-	A
77.1	8.0	-	GO	-	JOIN	-	A
78.1	8.0	-	MEET	-	-	-	X
79.1	8.0	DECIDE	GO	-	JOIN	-	A
81.1	8.0	DECIDE	JOIN	-	-	-	P
82.1	8.0	-	MEET	-	JOIN	-	X
83.1	8.0	-	MEET	-	-	-	X
84.1	8.0	-	SEE	-	-	-	X
85.1	8.0	-	GO	-	-	-	A
86.1	8.0	-	MEET	-	-	-	X
87.1	8.0	DECIDE	GO	TO	-	-	A

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	8.0	-	GO	-	-	-	A
23.2	8.0	-	FIND	-	-	-	P
24.2	8.0	-	GO	-	-	-	A
27.2	8.0	-	GO	-	-	-	A
28.2	8.0	-	REACH	-	-	-	P
29.2	8.0	-	GO	UP TO	-	-	A
30.2	8.0	-	GO	TOWARDS	-	-	A
31.2	8.0	-	FIND	-	-	-	P
32.2	8.0	-	GO	-	-	-	A
33.2	8.0	-	GO	-	-	-	A
34.2	8.0	DECIDE	GO	TO	-	-	A
35.2	8.0	DECIDE	JOIN	-	-	-	P
37.2	8.0	-	CONTINUE	-	-	-	T
38.2	8.0	-	GO	TO	-	-	A
39.2	8.0	-	FIND	-	-	-	P
40.2	8.0	-	GO	-	-	-	A
42.2	8.0	-	GO	-	-	-	A
43.2	8.0	-	MEET	-	-	-	X
44.2	8.0	-	SEE	-	STOP	-	X
45.2	8.0	-	SEE	-	-	-	X
46.2	8.0	-	SEE	-	-	-	X
61.2	8.0	-	GO	-	-	-	A
62.2	8.0	-	SEE	-	-	-	X
63.2	8.0	-	GO	TO	-	-	A
64.2	8.0	-	GO	-	-	-	A
65.2	8.0	-	COME	ACROSS	GO	IN	P
66.2	8.0	-	GO	-	-	-	A
68.2	8.0	-	GO	-	-	-	A
69.2	8.0	-	COME	ACROSS	-	-	P
71.2	8.0	-	FIND	-	-	-	P
72.2	8.0	-	SEE	-	-	-	X
73.2	8.0	-	GO	-	-	-	A
76.2	8.0	DECIDE	GO	-	JOIN	-	A
77.2	8.0	-	JOIN	-	-	-	P
78.2	8.0	-	?	-	-	-	?
79.2	8.0	DECIDE	JOIN	-	-	-	P
80.2	8.0	-	COME	NEARBY	DECIDE GO	-	P
81.2	8.0	-	GO	-	-	-	A
82.2	8.0	-	GO	INSIDE	-	-	A
83.2	8.0	-	FIND	-	-	-	P
84.2	8.0	DECIDE	GO	-	-	-	A
85.2	8.0	DECIDE	GO	-	-	-	A
86.2	8.0	-	WALK	-	-	-	M
87.2	8.0	-	GO	-	-	-	A
88.2	8.0	DECIDE	GO	-	-	-	A

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	8.0	-	MEET	-	-	-	X
22.1	8.0	-	FIND	-	STAND	-	P
23.1	8.0	-	REACH	-	-	-	P
24.1	8.0	-	ENTER	-	-	-	P
25.1	8.0	-	GO	-	JOIN	-	A
26.1	8.0	-	RUN	-	-	-	M
27.1	8.0	-	FIND	-	-	-	P
28.1	8.0	-	REACH	-	-	-	P
30.1	8.0	-	REACH	-	FIND	-	P
31.1	8.0	-	MEET	-	JOIN	-	X
32.1	8.0	-	STOP	-	-	-	T
33.1	8.0	-	GO	-	-	-	A
34.1	8.0	-	PASS	-	FIND	-	P
35.1	8.0	DECIDE	JOIN	-	-	-	P
36.1	8.0	DECIDE	GO	-	-	-	A
37.1	8.0	-	RUN	-	-	-	M
38.1	8.0	-	GO	-	-	-	A
39.1	8.0	-	CONTINUE	-	-	-	T
40.1	8.0	-	JOIN	-	-	-	P
41.1	8.0	-	GO	-	-	-	A
42.1	8.0	-	GO	-	JOIN	-	A
43.1	8.0	-	GO	-	JOIN	-	A
45.1	8.0	DECIDE	GO	-	-	-	A
46.1	8.0	-	GO	-	FIND	-	A
47.1	8.0	-	FIND	-	-	-	P
48.1	8.0	-	SEE	-	-	-	X
49.1	8.0	-	FIND	-	-	-	P
50.1	8.0	-	COME	TO	JOIN	-	P
51.1	8.0	-	GO	NEAR	-	-	A
62.1	8.0	-	REACH	-	-	-	P
63.1	8.0	-	SEE	-	-	-	X
64.1	8.0	-	JOIN	-	-	-	P
65.1	8.0	-	MEET	-	-	-	X
66.1	8.0	-	MEET	-	-	-	X
67.1	8.0	-	MEET	-	-	-	X
69.1	8.0	-	ATTEND	-	-	-	X
70.1	8.0	-	REACH	-	GO	-	P
71.1	8.0	-	FIND	-	-	-	P
72.1	8.0	-	MEET	-	JOIN	-	X
73.1	8.0	-	GO	TO	-	-	A
74.1	8.0	-	ARRIVE	-	HAVE TO GO	-	P
75.1	8.0	-	COME	TO	-	-	P
81.1	8.0	-	STOP	-	-	-	T
82.1	8.0	-	REACH	-	STOP	-	P
83.1	8.0	-	MEET	-	JOIN	-	X
84.1	8.0	-	COME	ACROSS	-	-	P
86.1	8.0	-	FIND	-	-	-	P

LUNYORE SP-EAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	8.0	-	GO	-	-	-	A
22.2	8.0	-	FIND	-	STOP	-	P
24.2	8.0	-	GO?	-	-	-	A
25.2	8.0	-	MEET	-	-	-	X
26.2	8.0	WANT	?	OVER	-	-	?
27.2	8.0	-	GO	TO	-	-	A
28.2	8.0	-	WALK	-	-	-	M
29.2	8.0	-	JOIN	-	-	-	P
30.2	8.0	-	WALK	TOWARDS	-	-	M
31.2	8.0	-	MEET	-	JOIN	-	X
33.2	8.0	-	JOIN	-	-	-	P
34.2	8.0	-	GO	-	JOIN	-	A
35.2	8.0	-	RUN	-	JOIN	-	M
36.2	8.0	DECIDE	GO	-	-	-	A
37.2	8.0	-	RUN	-	-	-	M
38.2	8.0	-	GO	-	-	-	A
39.2	8.0	-	RUSH	-	-	-	M
40.2	8.0	-	JOIN	-	-	-	X
41.2	8.0	-	GO	-	REACH	-	A
42.2	8.0	-	GO	-	-	-	A
43.2	8.0	-	GO	-	-	-	A
44.2	8.0	-	GO	-	-	-	A
46.2	8.0	-	GO	-	FIND	-	A
47.2	8.0	-	GO	-	-	-	A
48.2	8.0	-	SEE	-	-	-	X
49.2	8.0	-	FIND	-	-	-	P
50.2	8.0	-	RUN	-	GO	-	M
51.2	8.0	-	GO	-	-	-	A
61.2	8.0	-	MEET	-	-	-	X
63.2	8.0	-	GO	-	-	-	A
65.2	8.0	-	MEET	-	JOIN	-	X
66.2	8.0	-	MEET	-	-	-	P
67.2	8.0	-	REACH	-	DECIDEJOIN	-	P
68.2	8.0	-	JOIN	-	-	-	P
69.2	8.0	-	COME	TO	GO	-	P
70.2	8.0	-	JOIN	-	-	-	P
71.2	8.0	-	FIND	-	-	-	P
73.2	8.0	-	PASS	BY	SEE	-	P
74.2	8.0	-	COME	TO	DECIDEJOIN	-	P
75.2	8.0	-	COME	-	FIND	-	P
78.2	8.0	-	GO	-	-	-	A
79.2	8.0	-	MEET	-	-	-	X
81.2	8.0	-	STOP	-	-	-	T
82.2	8.0	-	REACH	-	STOP	-	P
83.2	8.0	-	MEET	-	-	-	X
84.2	8.0	-	REACH	-	-	-	P
87.2	8.0	-	MEET	-	-	-	X

(9) Seeing that it was....late, he SQUEEZED PAST two fat women

N A T I V E S P E A K E R S

MT	101	09.squeezed through...past
	102	09.squeezed past
	103	09.left...squeezing past
	104	09.go on his way
	105	09.squeezed past
	106	09.tried to get away
	107	09.-
	108	09.pushed past
	109	09.pushed through
MT	201	09.squeezed past
	202	09.-
	203	09.-
	204	09.squeezed between
	205	09.pushed past
	206	09.squeezed past
	207	09.barged past
	208	09.-
	209	09.squeezed past
	210	09.decided.have to make way back
	211	09.pushed his way through
	212	09.pushed between
	213	09.had to squeeze through
	214	09.barged past
	215	09.squeezed past
	216	09.squeezed past
	217	09.had to push ?out
	218	09.squeezed in between
	219	09.squeezed past
	220	09.squeezed past
	221	09.squeezed in between
	222	09.managed to squeeze through
	223	09.headed off again
	224	09.moved past

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	9.0	-	PASS	AT	-	-	P
33.1	9.0	-	PASS	IN BETWEEN	-	-	P
34.1	9.0	-	PUSH	INSIDE	-	-	M
35.1	9.0	TRY	MOVE	OUT	PUSH	-	A
36.1	9.0	DECIDE	GO	-	HIDE?	-	A
37.1	9.0	-	PASS	THROUGH	-	-	P
38.1	9.0	-	LEAVE	BETWEEN	-	-	P
39.1	9.0	-	PUSH	OFF FROM	-	-	M
40.1	9.0	DECIDE	LEAVE	-	-	-	P
41.1	9.0	-	PASS	NEAR	-	-	P
42.1	9.0	-	SQUEEZE	BETWEEN	-	-	M
46.1	9.0	START	JUMP?	THROUGH	-	-	M
47.1	9.0	DECIDE	HIDE	BETWEEN	-	-	X
48.1	9.0	-	LEAVE	-	PUSH	BETWEEN	P
50.1	9.0	-	SQUEEZE	THROUGH	-	-	M
51.1	9.0	TRY	PASS	THROUGH	-	-	P
52.1	9.0	-	PASS	BETWEEN	-	-	P
53.1	9.0	-	SQUEEZE	BETWEEN	-	-	M
54.1	9.0	-	GO	-	KNOCK	-	A
55.1	9.0	-	HURRY	-	GO	AWAY	M
57.1	9.0	-	PASS	THROUGH	-	-	P
58.1	9.0	-	PASS	THROUGH	-	-	P
61.1	9.0	DECIDE	PASS	BETWEEN	-	-	P
62.1	9.0	DECIDE	SQUEEZE	S.OUT BETW	-	-	M
63.1	9.0	-	SQUEEZE	SELF NEAR	-	-	M
64.1	9.0	DECIDE	PASS	-	-	-	P
66.1	9.0	-	MAKE WAY	THROUGH	-	-	X
67.1	9.0	-	MAKE WAY	THROUGH	-	-	X
68.1	9.0	HAVE TO	PUSH	S.BETWEEN	-	-	M
69.1	9.0	-	PASS	IN BETWEEN	-	-	P
70.1	9.0	TRY	GO	THROUGH	-	-	A
71.1	9.0	-	PASS	IN BETWEEN	-	-	P
72.1	9.0	MANAGE	FIND WAY	-	-	-	P
73.1	9.0	-	SQUEEZE	SELF AMONG	-	-	M
74.1	9.0	-	PASS	THROUGH	-	-	P
75.1	9.0	DECIDE	SQUEEZE	SELF PAST	-	-	M
76.1	9.0	DECIDE	SQUEEZE	SELF PAST	-	-	M
77.1	9.0	-	LEAVE	-	-	-	P
78.1	9.0	-	COME	OUT	-	-	P
79.1	9.0	-	PASS	BETWEEN	-	-	P
80.1	9.0	-	DASH	OUT	-	-	M
81.1	9.0	-	PROCEED	-	-	-	X
82.1	9.0	-	PASS	BETWEEN	-	-	P
83.1	9.0	-	PASS	BETWEEN	-	-	P
84.1	9.0	-	FORCE WAY	THROUGH	-	-	X
85.1	9.0	-	PENETRATE	WAYAMONGST	-	-	?
86.1	9.0	START	SQUEEZE	SELF THRO'	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	9.0	-	PASS	BETWEEN	-	-	P
33.2	9.0	-	FIX	BETWEEN	-	-	X
34.2	9.0	-	FORCE	INSIDE	-	-	M
35.2	9.0	-	SCRAMBLE	OVER	-	-	M
36.2	9.0	-	GO	-	PUSH	-	A
37.2	9.0	-	PASS	THROUGH	-	-	P
38.2	9.0	-	FORCE	OUT OF	-	-	M
39.2	9.0	-	CREEP?	FROM	-	-	M
40.2	9.0	-	HEAVE?	THROUGH	-	-	M
41.2	9.0	-	PASS	BETWEEN	-	-	P
42.2	9.0	-	SQUEEZE	THROUGH	-	-	M
46.2	9.0	-	CONTINUE	THROUGH	-	-	T
47.2	9.0	-	PASS	BETWEEN	-	-	P
48.2	9.0	-	PUSH	BETWEEN	-	-	M
50.2	9.0	-	SQUEEZE	PAST	-	-	M
51.2	9.0	-	SQUEEZE	WAY THRO'	-	-	M
52.2	9.0	-	PASS	IN BETWEEN	-	-	P
53.2	9.0	DECIDE	PASS	THROUGH	-	-	P
54.2	9.0	-	KNOCK	-	FIND	WAY OUT	M
55.2	9.0	-	SQUEEZE	IN BETWEEN	ESCAPE	-	M
56.2	9.0	BEGIN	RUN	-	-	-	M
57.2	9.0	-	PASS	THROUGH	-	-	P
58.2	9.0	-	SQUEEZE	S.BETWEEN	RUN	-	M
61.2	9.0	DECIDE	LEAVE	-	SNEAK...GO	THROUGH	P
62.2	9.0	TRY	MAKE WAY	OUT FROM	-	-	X
63.2	9.0	DECIDE	SQUEEZE	SELF AMONG	-	-	M
64.2	9.0	DECIDE	SQUEEZE	sINBETWEEN	-	-	M
65.2	9.0	-	WALK	THROUGH	-	-	M
66.2	9.0	DECIDE	MAKE WAY	THROUGH	-	-	X
67.2	9.0	-	SQUEEZE	WAYTHROUGH	-	-	M
68.2	9.0	HAVE TO	PUSH	SELF OUT	-	-	M
69.2	9.0	-	SQUEEZE	S.BETWEEN	-	-	M
71.2	9.0	-	CONTINUE	-	-	-	T
72.2	9.0	-	SQUEEZE	HIS WAY	-	-	M
73.2	9.0	-	SQUEEZE	S.BETWEEN	-	-	M
74.2	9.0	-	PASS	THROUGH	-	-	P
75.2	9.0	-	SQUEEZE	SELF THRO'	-	-	M
76.2	9.0	-	SQUEEZE	PAST	-	-	M
77.2	9.0	DECIDE	LEAVE	-	-	-	P
78.2	9.0	-	LEAVE	-	-	-	P
79.2	9.0	-	PUSH	WAY THRO'	-	-	M
80.2	9.0	-	DASH	OUT OF	-	-	M
81.2	9.0	-	PROCEED	-	-	-	X
82.2	9.0	-	PASS	-	GET WAY	BETWEEN	P
83.2	9.0	-	PUSH	THROUGH	-	-	M
84.2	9.0	-	PUSH	SELF THRO'	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	9.0	-	PASS	THROUGH	-	-	P
22.1	9.0	-	GO	INMIDDLEOF	GO	THROUGH	A
23.1	9.0	-	PASS	THROUGH	-	-	P
24.1	9.0	TRY	PASS	OVER	-	-	P
25.1	9.0	DECIDE	PENETRATE	-	-	-	M
26.1	9.0	-	SQUEEZE	UP WITH	-	-	M
28.1	9.0	-	CONTINUE	-	-	-	T
29.1	9.0	-	PASS	THROUGH	-	-	P
30.1	9.0	-	PASS	-	-	-	P
32.1	9.0	DECIDE	WEDGE	BETWEEN	-	-	M
33.1	9.0	START	PENETRATE	-	-	-	M
34.1	9.0	-	RUSH	BETWEEN	-	-	M
35.1	9.0	DECIDE	PASS	THROUGH	-	-	P
36.1	9.0	-	PASS	THROUGH	-	-	P
37.1	9.0	-	GO	THROUGH	HIT	-	A
38.1	9.0	-	PUSH	-	CROSS	-	M
39.1	9.0	-	PUSH	-	-	-	M
41.1	9.0	-	PASS	THROUGH	-	-	P
43.1	9.0	-	PASS	THROUGH	PUSH	-	P
45.1	9.0	-	GO	THROUGH	-	-	A
46.1	9.0	DECIDE	PUSH	-	-	-	M
61.1	9.0	-	SQUEEZE	THROUGH	-	-	M
62.1	9.0	-	GO	THROUGH	-	-	A
64.1	9.0	-	GO	THROUGH	SQUEEZE	BETWEEN	A
65.1	9.0	-	FORCE WAY	OUTBETWEEN	-	-	M
66.1	9.0	-	GO	-	-	-	A
67.1	9.0	-	PASS	IN BETWEEN	-	-	P
68.1	9.0	-	LEAVE	-	-	-	P
69.1	9.0	-	CONTINUE	-	-	-	T
70.1	9.0	-	GO	THROUGH	-	-	A
71.1	9.0	-	PENETRATE	OUT OF	-	-	M
72.1	9.0	-	GO	THROUGH	-	-	A
73.1	9.0	-	FETCH?	-	-	-	X
74.1	9.0	-	PASS	THROUGH	-	-	P
75.1	9.0	-	SQUEEZE	THROUGH	-	-	M
76.1	9.0	-	SQUEEZE	THROUGH	-	-	M
77.1	9.0	TRY	SQUEEZE	BETWEEN	-	-	M
78.1	9.0	HAVE TO	PASS	ON	-	OTHER SIDE	P
79.1	9.0	-	PUSH	-	HURRY	OUT OF	M
81.1	9.0	DECIDE	GO	AWAY	-	-	A
82.1	9.0	-	PUSH	BEYOND	-	-	M
83.1	9.0	-	PRESS	THROUGH	-	-	M
84.1	9.0	-	PAVE? WAY	BETWEEN	-	-	M
85.1	9.0	-	GO	-	PASS	THROUGH	A
86.1	9.0	-	FORCE	BETWEEN	-	-	M
87.1	9.0	-	SQUEEZE	THROUGH	-	-	M

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	9.0	-	SQUEEZE	BETWEEN	PASS	-	M
22.2	9.0	-	GO	THROUGH	-	-	A
23.2	9.0	-	GO	THROUGH	-	-	A
24.2	9.0	DECIDE	PASS	OVER	-	-	P
25.2	9.0	TRY	SQUEEZE	?	-	-	M
27.2	9.0	-	PUSH	THROUGH	-	-	M
28.2	9.0	-	SQUEEZE	THROUGH	-	-	M
29.2	9.0	-	SQUEEZE	OUT OF	-	-	M
30.2	9.0	-	SQUEEZE	THROUGH	-	-	M
31.2	9.0	-	PASS	THROUGH	-	-	P
32.2	9.0	-	WEDGE	THROUGH	-	-	M
33.2	9.0	-	MAKE WAY	IN BETWEEN	-	-	X
34.2	9.0	DECIDE	PASS	THROUGH	-	-	P
35.2	9.0	-	SQUEEZE	OVER	-	-	M
37.2	9.0	-	SQUEEZE	BETWEEN	-	-	M
38.2	9.0	-	PUSH	-	PASS	THROUGH	M
40.2	9.0	-	SQUEEZE	THROUGH	-	-	M
42.2	9.0	-	PUSH	IN BETWEEN	-	-	M
43.2	9.0	-	SQUEEZE	-	-	-	M
44.2	9.0	-	SQUEEZE	THROUGH	-	-	M
45.2	9.0	-	GO	THROUGH	-	-	A
46.2	9.0	-	PASS	THROUGH	-	-	P
61.2	9.0	-	SQUEEZE	THROUGH	-	-	M
62.2	9.0	-	SQUEEZE	INTO	-	-	M
63.2	9.0	-	SQUEEZE	THROUGH	-	-	M
64.2	9.0	-	SQUEEZE	BETWEEN	-	-	M
65.2	9.0	-	FORCE WAY	OUTTHROUGH	-	-	M
66.2	9.0	DECIDE	LEAVE	-	-	-	P
68.2	9.0	-	GO	AWAY	-	-	A
69.2	9.0	-	SQUEEZE	-	PASS	THROUGH	M
71.2	9.0	-	PENETRATE	THROUGH	-	-	M
72.2	9.0	-	GO	THROUGH	-	-	A
73.2	9.0	-	SQUEEZE	THROUGH	-	-	M
76.2	9.0	-	SQUEEZE	THROUGH	-	-	M
77.2	9.0	TRY	SQUEEZE	BETWEEN	-	-	M
78.2	9.0	DECIDE	PASS	?	-	-	P
79.2	9.0	DECIDE	LEAVE	-	-	-	P
80.2	9.0	-	PASS	BETWEEN	-	-	P
81.2	9.0	-	STRUGGLE	PAST	-	-	X
82.2	9.0	-	COME	-	PUSH	-	P
83.2	9.0	-	SQUEEZE	THROUGH	-	-	M
84.2	9.0	-	SQUEEZE	THROUGH	-	-	M
85.2	9.0	-	PASS	THROUGH	-	-	P
86.2	9.0	-	SQUEEZE	THROUGH	-	-	M
87.2	9.0	-	SQUEEZE	THROUGH	-	-	M
88.2	9.0	DECIDE	GO	HOME?	-	-	A

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	9.0	TRY	GO	THROUGH	PASS	-	A
22.1	9.0	TRY	PASS	BETWEEN	-	-	P
23.1	9.0	-	GO	-	PASS	BETWEEN	A
24.1	9.0	-	PUSH	-	-	-	M
25.1	9.0	-	STAND	BETWEEN	-	-	X
26.1	9.0	-	SQUEEZE	THROUGH	-	-	M
27.1	9.0	STRUGGLE	CUT	THROUGH	-	-	X
28.1	9.0	-	PASS	-	SQUEEZE	BETWEEN	P
30.1	9.0	-	GO	BACK	-	-	A
33.1	9.0	-	CONTINUE	-	-	-	T
34.1	9.0	-	LEAVE	-	-	-	P
35.1	9.0	TRY	PASS	THROUGH	-	-	P
36.1	9.0	-	PASS	BETWEEN	-	-	P
37.1	9.0	-	PASS	THROUGH	-	-	P
38.1	9.0	-	PASS	BETWEEN	-	-	P
39.1	9.0	TRY	FOLLOW	BETWEEN	-	-	P
42.1	9.0	-	SHAKE?	-	-	-	X
43.1	9.0	-	PUSH	FROM	-	-	M
45.1	9.0	DECIDE	GO	ON	-	-	A
46.1	9.0	-	PUSH	-	-	-	M
47.1	9.0	-	LEAVE	-	-	-	P
48.1	9.0	FORCE	COME	FROM	PASS	-	P
49.1	9.0	TRY	PASS	-	GET	AWAY	P
50.1	9.0	TRY	PUSH?	OUT PAST	-	-	M
51.1	9.0	HAVE TO	PASS	-	-	-	P
61.1	9.0	-	PASS	THROUGH	-	-	P
62.1	9.0	-	PUSH	BETWEEN	-	-	M
63.1	9.0	DECIDE	PASS	THROUGH	-	-	P
64.1	9.0	-	STRUGGLE	IN BETWEEN	GO	THROUGH	M
65.1	9.0	DECIDE	MOVE	QUICKLY	-	-	A
66.1	9.0	-	PAVE? WAY	THROUGH	-	-	X
67.1	9.0	TRY	FORCE	S.THROUGH	-	-	M
68.1	9.0	-	PUSH	-	GO	THROUGH	M
69.1	9.0	-	SQUEEZE	THROUGH	-	-	M
70.1	9.0	-	LEAVE	-	-	-	P
71.1	9.0	START	RUSH	BACK	-	-	M
72.1	9.0	-	START	-	-	-	T
73.1	9.0	DECIDE	GO	BACK	-	-	A
74.1	9.0	-	SQUEEZE	AMONG	-	-	M
75.1	9.0	-	GO	ON	MOVE	-	A
81.1	9.0	TRY	PUSH	OUT	-	-	M
82.1	9.0	-	SQUEEZE	THROUGH	-	-	M
83.1	9.0	-	ESCAPE	THRO' BETW	-	-	P
84.1	9.0	-	SQUEEZE	BETWEEN	-	-	M
85.1	9.0	-	GET	OUT	SQUEEZE	THROUGH	A
86.1	9.0	TRY	PUSH	INTO	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	9.0	TRY	PASS	THROUGH	-	-	P
22.2	9.0	-	PASS	BETWEEN	-	-	P
24.2	9.0	-	PUSH	-	-	-	M
25.2	9.0	-	SQUEEZE	BETWEEN	-	-	M
26.2	9.0	-	SQUEEZE	THROUGH	-	-	M
27.2	9.0	-	SQUEEZE	BETWEEN	-	-	M
28.2	9.0	-	LEAVE	-	-	-	P
29.2	9.0	-	SQUEEZE	BETWEEN	-	-	M
33.2	9.0	-	CONTINUE	-	-	-	T
34.2	9.0	-	COME	OUTBETWEEN	-	-	P
35.2	9.0	TRY	PASS	THROUGH	-	-	P
36.2	9.0	-	SQUEEZE	THROUGH	-	-	M
37.2	9.0	-	PASS	THROUGH	-	-	P
38.2	9.0	-	SQUEEZE	-	PASS	THROUGH	M
39.2	9.0	-	SQUEEZE	BETWEEN	-	-	M
40.2	9.0	-	SQUEEZE	IN	-	-	M
41.2	9.0	-	LEAVE	-	-	-	P
42.2	9.0	START	SQUEEZE	BETWEEN	-	-	M
43.2	9.0	-	SQUEEZE	WITH?	-	-	M
44.2	9.0	-	PUSH	-	PASS	IN BETWEEN	M
45.2	9.0	-	SQUEEZE	THROUGH	-	-	M
46.2	9.0	-	PASS	THROUGH	-	-	P
47.2	9.0	START	PASS	BETWEEN	-	-	P
48.2	9.0	-	FORCE	BETWEEN	-	-	M
49.2	9.0	-	FOLLOW	-	TRY PASS	THROUGH	P
50.2	9.0	START	CRUSH?	-	GET WAY	TO	X
51.2	9.0	HAVE TO	PASS	-	-	-	P
61.2	9.0	-	PASS	THROUGH	-	-	P
63.2	9.0	-	SQUEEZE	THROUGH	-	-	M
66.2	9.0	-	PAVE? WAY	THROUGH	-	-	X
67.2	9.0	HAVE TO	SQUEEZE	THROUGH	-	-	M
68.2	9.0	-	PUSH	AROUND	LEAVE	-	M
69.2	9.0	-	SQUEEZE	THROUGH	-	-	M
70.2	9.0	-	PASS	BETWEEN	SNEAK WAY	OUT	P
71.2	9.0	-	SQUEEZE	THROUGH	-	-	M
72.2	9.0	DECIDE	SQUEEZE	AWAY FROM	-	-	M
73.2	9.0	-	SQUEEZE	AMONG	PASS	-	M
74.2	9.0	-	SQUEEZE	AMONG	-	-	M
75.2	9.0	-	PASS	THROUGH	-	-	P
78.2	9.0	-	SQUEEZE	BETWEEN	-	-	M
79.2	9.0	-	SNEAK	-	LEAVE	-	M
81.2	9.0	-	SQUEEZE	OUTBETWEEN	-	-	M
82.2	9.0	-	WALK	THROUGH	-	-	M
83.2	9.0	-	PASS	THROUGH	-	-	P
84.2	9.0	-	SQUEEZE	BETWEEN	-	-	M
87.2	9.0	-	GO	ON	-	-	A

(10) and HURRIED ROUND a corner....

N A T I V E S P E A K E R S

MT 101	10.rushed round corner
102	10.went round shop
103	10.went round behind
104	10.came to...went round
105	10.walked round narrow street
106	10.walked along muddy path
107	10.walked round school house
108	10.went round corner
109	10.came round corner
MT 201	10.went round the corner
202	10.walked on
203	10.went round the bend
204	10.-
205	10...to get round corner
206	10.walked down path
207	10.walked round a corner
208	10.walked round corner
209	10.hurried round corner
210	10.went round corner
211	10.-
212	10.-
213	10.-
214	10.kept walking on past shops
215	10.-
216	10.going round a bend
217	10.-
218	10.walked around corner
219	10.went round side of building
220	10.went round corner
221	10.went round corner
222	10.-
223	10.-
224	10.ran round back of house

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	10.0	-	GO	-	PASS	AT	A
33.1	10.0	-	PASS	BEHIND	-	-	P
34.1	10.0	-	PASS	-	-	-	P
35.1	10.0	START	RUN	-	PASS	-	M
37.1	10.0	-	MOVE	-	PASS	BEHIND	A
38.1	10.0	-	FOLLOW	BEHIND	-	-	P
39.1	10.0	-	TAKE	-	-	-	P
40.1	10.0	-	GO	-	PASS	BESIDE	A
47.1	10.0	-	LEAVE	-	-	-	P
48.1	10.0	-	GO	BESIDE	-	-	A
50.1	10.0	-	PASS	-	-	-	P
51.1	10.0	-	GO	HURR'LY PA	-	-	A
53.1	10.0	-	GO	-	PASS	NEAR	A
54.1	10.0	-	WALK	NEAR	-	-	M
55.1	10.0	-	GO	BEHIND	-	-	A
57.1	10.0	-	TAKE	-	-	-	P
58.1	10.0	-	PASS	NEAR	-	-	P
61.1	10.0	-	PASS	BESIDE	-	-	P
62.1	10.0	-	FOLLOW	-	-	-	P
64.1	10.0	DECIDE	TAKE	-	-	-	P
66.1	10.0	-	RUN	BEHIND	-	-	M
67.1	10.0	-	CONTINUE	ROUND	-	-	T
68.1	10.0	-	GO	THROUGH	-	-	A
69.1	10.0	-	GO	ROUND	-	-	A
70.1	10.0	-	GO	PAST	-	-	A
71.1	10.0	-	TAKE	HIS WAY	-	-	P
72.1	10.0	-	HURRY	-	GO	PAST	M
73.1	10.0	-	GO	BESIDE	-	-	A
74.1	10.0	-	FOLLOW	NEAR	-	-	P
75.1	10.0	DECIDE	TAKE	-	-	-	P
76.1	10.0	TRY	HASTE	-	-	-	M
77.1	10.0	-	GO	ALONG	-	-	A
79.1	10.0	-	PASS	-	-	-	P
80.1	10.0	-	WALK	-	FOLLOW	BESIDE	M
81.1	10.0	-	PASS	BESIDE	-	-	P
82.1	10.0	-	COME	NEAR	PASS	BEHIND	P
84.1	10.0	-	FOLLOW	-	-	-	P
85.1	10.0	-	NEGOTIATE	-	-	-	X
86.1	10.0	-	GET	WAY BACK	-	-	A

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	10.0	-	PASS	BEHIND	-	-	P
33.2	10.0	-	PASS	-	FOLLOW	BEHIND	P
34.2	10.0	-	PASS	AT SIDE OF	-	-	P
36.2	10.0	-	REACH	-	-	-	P
37.2	10.0	-	WALK	BESIDE	-	-	M
38.2	10.0	-	RUN	TO	-	-	M
39.2	10.0	-	GO	ROUND	-	-	A
40.2	10.0	-	FOLLOW	BESIDE	-	-	P
41.2	10.0	-	PASS	NEAR	-	-	P
42.2	10.0	-	FIND	SELF	-	-	P
48.2	10.0	-	REACH	NEAR	-	-	P
50.2	10.0	-	STRIDE	PAST	-	-	M
54.2	10.0	-	PASS	NEAR	-	-	P
55.2	10.0	-	PASS	BEHIND	-	-	P
56.2	10.0	-	RUN	BEHIND	-	-	M
57.2	10.0	-	TAKE	-	-	-	P
58.2	10.0	-	PASS	-	-	-	P
62.2	10.0	-	MOVE	-	FOLLOW	-	A
64.2	10.0	-	PASS	BETWEEN	-	-	P
65.2	10.0	-	PASS	-	WALK	BY	P
66.2	10.0	-	PASS	BEHIND	-	-	P
67.2	10.0	START	WALK	ROUND	-	-	M
68.2	10.0	-	REACH	-	HAVE..PASS	-	P
69.2	10.0	-	WALK	BEHIND	-	-	M
72.2	10.0	-	WALK	V.FASTPAST	-	-	M
73.2	10.0	-	FOLLOW	BESIDE	FIND	-	P
74.2	10.0	-	MAKECORNER	AROUND	-	-	X
75.2	10.0	-	TAKE	-	-	-	P
76.2	10.0	-	GO	TO BACK OF	-	-	A
77.2	10.0	-	GO	RUN	NEGOTIATE	-	A
78.2	10.0	-	REACH	TO	-	-	P
79.2	10.0	-	PASS	THROUGH	-	-	P
80.2	10.0	-	REACH	BESIDE	-	-	P
81.2	10.0	-	CROSS	PAST	-	-	P
82.2	10.0	-	GO	PAST	-	-	A
83.2	10.0	-	PASS	-	-	-	P
84.2	10.0	-	FOLLOW	BEHIND	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	10.0	-	PASS	-	-	-	P
23.1	10.0	-	GO	ACROSS	FIND	-	A
24.1	10.0	-	GO	-	-	-	A
25.1	10.0	-	PASS	-	-	-	P
28.1	10.0	-	REACH	-	PASS	THROUGH	P
29.1	10.0	-	GO	-	PASS	-	A
32.1	10.0	-	GO	-	-	-	A
33.1	10.0	-	GO	TO	-	-	A
34.1	10.0	-	REACH	NEAR	-	-	P
35.1	10.0	-	GO	AROUND	-	-	A
36.1	10.0	-	GO	-	-	-	A
37.1	10.0	-	GO	ROUND	-	-	A
38.1	10.0	-	FOLLOW	-	-	-	P
39.1	10.0	-	RUN	AWAY	-	-	M
40.1	10.0	-	COME	PAST	-	-	P
42.1	10.0	-	FOLLOW	-	-	-	P
43.1	10.0	-	REACH	-	-	-	P
44.1	10.0	-	LEAVE	-	-	-	P
45.1	10.0	-	PASS	THROUGH	-	-	P
61.1	10.0	-	GO	ROUND	-	-	A
62.1	10.0	-	FOLLOW	BEHIND	-	-	P
64.1	10.0	-	NEGOTIATE	-	-	-	X
65.1	10.0	-	GO	AHEAD	-	THROUGH	A
66.1	10.0	-	CONTINUE	-	-	-	T
67.1	10.0	-	SWERVE	-	-	-	M
68.1	10.0	-	PASS	-	GO	BEHIND	P
69.1	10.0	-	GO	ACROSS	-	-	A
71.1	10.0	-	PASS	-	-	-	P
72.1	10.0	START	GO	-	-	-	A
73.1	10.0	-	REACH	TO	PASS	THROUGH	P
74.1	10.0	-	TAKE	-	-	-	X
75.1	10.0	-	GO	OVER	-	-	A
76.1	10.0	-	GO	TOWARDS	-	-	A
77.1	10.0	-	GO	AROUND	-	-	A
78.1	10.0	-	MEET	-	PASS	-	X
79.1	10.0	-	GO	BEHIND	-	-	A
81.1	10.0	-	NEGOTIATE	-	-	-	X
82.1	10.0	-	FOLLOW	BEHIND	-	-	P
83.1	10.0	-	TURN	INTO	-	-	P
84.1	10.0	-	PASS	-	-	-	P
87.1	10.0	-	GO	PAST	-	-	A

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	10.0	-	PASS	-	-	-	P
22.2	10.0	-	TAKE	-	-	-	X
23.2	10.0	-	GO	ALONG AT	-	-	A
24.2	10.0	-	GO	-	-	-	A
25.2	10.0	-	GO	AROUND	-	-	A
28.2	10.0	-	GO	THROUGH	-	-	A
29.2	10.0	-	GO	AROUND	-	-	A
31.2	10.0	-	PASS	-	-	-	P
33.2	10.0	-	GO	BESIDE	-	-	A
34.2	10.0	-	COME	TO	GO	ROUND	P
35.2	10.0	-	GO	BACK ROUND	-	-	A
37.2	10.0	-	GO	AROUND	-	-	A
38.2	10.0	-	PASS	-	-	-	P
39.2	10.0	-	RUN	AWAY	CLIMB	-	M
40.2	10.0	-	COME	ACROSS	-	-	P
41.2	10.0	-	REACH	-	-	-	P
42.2	10.0	START	RUN	AROUND	-	-	M
43.2	10.0	-	REACH	-	-	-	P
44.2	10.0	-	MOVE	-	-	-	A
45.2	10.0	-	GO	BEHIND	-	-	A
46.2	10.0	-	GO	ALONG	-	-	A
61.2	10.0	-	GO	ROUND	-	-	A
62.2	10.0	-	GO	BEHIND	-	-	A
63.2	10.0	-	GO	BEHIND	-	-	A
64.2	10.0	-	NEGOTIATE	-	-	-	X
65.2	10.0	-	COME	TO	TURN	ALONG	P
66.2	10.0	-	TURN	IN	-	-	P
68.2	10.0	-	GO	AROUND	-	-	A
71.2	10.0	-	GO	ROUND	-	-	A
73.2	10.0	-	WALK	PAST	-	-	M
76.2	10.0	-	FOLLOW	-	-	-	P
77.2	10.0	-	TURN	ON TO	-	-	P
78.2	10.0	-	PASS	THROUGH	-	-	P
79.2	10.0	-	GO	TO	-	-	A
80.2	10.0	-	COME	TO	-	-	P
81.2	10.0	-	PASS	-	-	-	P
82.2	10.0	-	GO	BEHIND	-	-	A
83.2	10.0	-	GO	ROUND	-	-	A
84.2	10.0	-	PASS	-	-	-	P
86.2	10.0	-	?	-	-	-	?

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	10.0	START	GO	-	-	-	A
23.1	10.0	-	GO	ROUND	-	-	A
24.1	10.0	-	REACH	-	-	-	P
26.1	10.0	-	FOLLOW	-	-	-	P
27.1	10.0	-	GO	TO	-	-	A
30.1	10.0	-	BEND	-	CROSS	TOWARDS	P
31.1	10.0	-	CONTINUE	-	-	-	T
32.1	10.0	-	GO	THROUGH	-	-	A
33.1	10.0	-	PASS	TO	-	-	P
34.1	10.0	-	GO	THROUGH	-	-	A
35.1	10.0	-	TAKE	-	-	-	P
36.1	10.0	-	WALK	AROUND	-	-	M
37.1	10.0	-	PASS	THROUGH	-	-	P
38.1	10.0	-	GO	IN RNDAB'T	-	-	A
42.1	10.0	-	PASS	BEHIND	-	-	P
45.1	10.0	-	GO	BEHIND	-	-	A
46.1	10.0	-	PASS	-	-	-	P
47.1	10.0	-	MEET	-	-	-	X
48.1	10.0	-	GO	ROUND	-	-	A
49.1	10.0	TRY	PASS	THROUGH	-	-	P
50.1	10.0	-	FOLLOW	BEHIND	-	-	P
61.1	10.0	-	FOLLOW	OVER THRO'	-	-	P
62.1	10.0	-	REACH	-	-	-	P
63.1	10.0	-	GO	ROUND	-	-	A
64.1	10.0	-	FOLLOW	-	-	-	P
66.1	10.0	-	TAKE	-	-	-	P
67.1	10.0	-	REACH	AT	-	-	P
69.1	10.0	-	PASS	BEHIND	-	-	P
70.1	10.0	-	NEGOTIATE	-	-	-	X
71.1	10.0	-	FOLLOW	-	-	-	P
72.1	10.0	-	REACH	BEHIND	-	-	P
74.1	10.0	-	CONNECT?	-	-	-	X
75.1	10.0	-	PASS	-	-	-	P
81.1	10.0	-	TAKE	-	-	-	P
82.1	10.0	-	REACH	-	WALK	BEHIND	P
85.1	10.0	-	FIND WAY	OUT BEHIND	-	-	P
86.1	10.0	-	PASS	AT BACK OF	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	10.0	-	GO	TO	-	-	A
22.2	10.0	-	TAKE	-	-	-	P
24.2	10.0	-	REACH	-	-	-	P
27.2	10.0	-	GO	TO	-	-	A
28.2	10.0	-	FOLLOW	-	-	-	P
29.2	10.0	-	WALK	ALONG	-	-	M
30.2	10.0	-	REACH	-	WALK	AROUND	P
31.2	10.0	-	GO	PAST	-	-	A
33.2	10.0	-	REACH	AT	FOLLOW	BEHIND	P
35.2	10.0	-	TAKE	-	-	-	P
36.2	10.0	-	TAKE	ALL ROUND	-	-	P
37.2	10.0	-	PASS	-	-	-	P
38.2	10.0	-	GO	TO	-	-	A
42.2	10.0	-	FOLLOW	BEHIND	-	-	P
44.2	10.0	-	REACH	-	-	-	P
45.2	10.0	-	GO	BACK TO	-	-	A
46.2	10.0	-	PASS	-	-	-	P
47.2	10.0	-	FIND	-	PASS	-	P
48.2	10.0	-	REACH	-	-	-	P
49.2	10.0	-	FOLLOW	-	-	-	P
50.2	10.0	-	PASS	TO	-	-	P
51.2	10.0	-	REACH	AT	PASS	-	P
61.2	10.0	-	STROLL	-	GO	PAST	M
63.2	10.0	-	WALK	ALONG R'ND	-	-	M
65.2	10.0	-	SNEAK	THROUGH	-	-	M
66.2	10.0	-	CONTINUE	-	-	-	T
67.2	10.0	-	WALK	-	-	-	M
68.2	10.0	-	GO	BEHIND	-	-	A
69.2	10.0	-	WALK	BEHIND	-	-	M
71.2	10.0	-	WALK	BEHIND	-	-	M
72.2	10.0	-	GO	ROUND	-	-	A
74.2	10.0	-	REACH	-	CONNECT	-	P
75.2	10.0	-	TAKE	-	-	-	P
78.2	10.0	-	WALK	ROUND?	-	-	M
81.2	10.0	-	WALK	ALONG	PASS	-	M
82.2	10.0	-	REACH	NEAR	WALK	BEHIND	P
83.2	10.0	-	JOG?	ON	-	-	M
84.2	10.0	-	TAKE	-	-	-	P

(10) ....to GET BACK on his path

N A T I V E S P E A K E R S

MT 101	101.to get away
102	101.-
103	101.-
104	101-
105	101.-
106	101.-
107	101.-
108	101.-
109	101.-
MT 201	101.-
202	101.-
203	101.-
204	101.started off again
205	101.-
206	101.-
207	101.carried on
208	101.-
209	101.-
210	101.-
211	101.hurried back on to path
212	101.walked on
213	101.kept walking
214	101.-
215	101.started to walk
216	101.[ran away]..to get back to
217	101.turned back to path again
218	101.-
219	101.-
220	101.-
221	101.to get to his own path
222	101.-
223	101.-
224	101.-

LUO SPEAKERS - 1ST RETELLING

Subj Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1 10.1	-	GO	ON	-	-	A
33.1 10.1	-	CONTINUE	-	-	-	T
34.1 10.1	-	CONTINUE	-	-	-	T
36.1 10.1	DECIDE	GO	-	-	-	A
38.1 10.1	-	START	-	-	-	T
39.1 10.1	-	SET	OFF	-	-	T
41.1 10.1	DECIDE	FOLLOW	-	-	-	P
48.1 10.1	-	WALK	-	GO	-	M
55.1 10.1	START	GO	-	-	-	A
56.1 10.1	DECIDE	GO	-	-	-	A
63.1 10.1	-	GET WAY	-	-	-	A
68.1 10.1	-	GO	HOME	-	-	A
69.1 10.1	-	START	-	-	-	T
76.1 10.1	-	MAKE WAY	TOWARDS	-	-	X
78.1 10.1	-	CONTINUE	-	-	-	T
81.1 10.1	-	PROCEED	-	-	-	X
83.1 10.1	-	GO	ON	-	-	A

LUO SPEAKERS - 2ND RETELLING

Subj Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2 10.1	-	GO	ON	-	-	A
35.2 10.1	-	GO	BACK	-	-	A
36.2 10.1	-	GO	ON	-	-	A
39.2 10.1	-	TAKE	-	-	-	P
41.2 10.1	-	TAKE	-	-	-	P
47.2 10.1	-	TAKE	-	-	-	P
49.2 10.1	-	GO	ON WAY	-	-	A
53.2 10.1	-	TAKE	-	-	-	P
63.2 10.1	-	TAKE	-	-	-	P
64.2 10.1	-	SET	OFF	-	-	T
72.2 10.1	-	GO	ON	-	-	A
76.2 10.1	-	TAKE	-	-	-	P
78.2 10.1	-	WALK	AHEAD	-	-	M
81.2 10.1	-	CONTINUE	-	-	-	T
83.2 10.1	-	WALK	TO	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	10.1	-	GO	-	-	-	A
25.1	10.1	START	GO	HOME	-	-	A
26.1	10.1	-	CONTINUE	-	-	-	T
31.1	10.1	-	CONTINUE	-	-	-	T
34.1	10.1	-	FOLLOW	-	-	-	P
37.1	10.1	-	CONTINUE	-	-	-	T
38.1	10.1	-	CONTINUE	-	-	-	T
40.1	10.1	-	CONTINUE	-	-	-	T
41.1	10.1	-	START	-	-	-	T
42.1	10.1	-	START	-	-	-	T
43.1	10.1	START	CONTINUE	-	-	-	T
44.1	10.1	-	PROCEED	ON	-	-	P
45.1	10.1	-	TAKE	-	-	-	X
46.1	10.1	-	CONTINUE	-	-	-	T
61.1	10.1	-	GO	-	GO	-	A
64.1	10.1	-	CONTINUE	-	-	-	T
71.1	10.1	-	GO	ON	-	-	A
74.1	10.1	-	FOLLOW	-	-	-	P
77.1	10.1	-	MOVE	-	-	-	A
79.1	10.1	-	GET	-	-	-	A
81.1	10.1	-	TAKE	-	-	-	X
83.1	10.1	-	CONTINUE	-	-	-	T
85.1	10.1	-	START	-	-	-	T
86.1	10.1	-	FOLLOW	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	10.1	-	CONTINUE	-	-	-	T
27.2	10.1	-	RUN	AWAY TO	-	-	M
28.2	10.1	-	GO	TO	-	-	A
31.2	10.1	-	CONTINUE	-	-	-	T
32.2	10.1	KEEP ON	GO	-	-	-	A
35.2	10.1	-	TAKE	-	-	-	X
37.2	10.1	-	CARRY	ON	-	-	T
38.2	10.1	-	GO	BACKWARDS	FOLLOW	-	A
41.2	10.1	CONTINUE	GO	ROUND TO	-	-	A
64.2	10.1	-	FOLLOW	-	-	-	P
65.2	10.1	-	GO	ALONG	-	-	A
69.2	10.1	-	CONTINUE	-	-	-	T
72.2	10.1	-	START	-	-	-	T
79.2	10.1	-	USE	-	-	-	X
82.2	10.1	-	LOOK	FOR	-	-	X
83.2	10.1	-	CONTINUE	-	-	-	T
85.2	10.1	-	GO	-	-	-	A
86.2	10.1	-	TAKE	-	-	-	X
87.2	10.1	-	GO	-	-	-	A

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	10.1	-	FIND	WAY BACK	-	-	P
22.1	10.1	-	CONTINUE	-	-	-	T
23.1	10.1	-	GO	ON	-	-	A
24.1	10.1	START	WALK	TOWARDS	-	-	M
25.1	10.1	START	GO	BACK	-	-	A
27.1	10.1	-	CROSS	-	-	-	P
28.1	10.1	-	GO	ON	-	-	A
32.1	10.1	-	START	AGAIN	-	-	T
37.1	10.1	-	CONTINUE	-	-	-	T
39.1	10.1	-	CONTINUE	-	-	-	T
40.1	10.1	-	START	-	-	-	T
41.1	10.1	-	START	-	-	-	T
42.1	10.1	-	COME	BACK	-	-	P
43.1	10.1	START	GO	-	-	-	A
47.1	10.1	-	CONTINUE	-	-	-	T
49.1	10.1	-	?	-	-	-	?
51.1	10.1	HAVE.START	GO	-	-	-	A
62.1	10.1	-	CONTINUE	-	-	-	T
63.1	10.1	-	GO	BACK	-	-	A
65.1	10.1	-	GET	ON TO	-	-	A
66.1	10.1	-	CONTINUE	-	-	-	T
68.1	10.1	-	CONTINUE	-	-	-	T
69.1	10.1	-	START	-	-	-	T
73.1	10.1	-	GO	BACK	-	-	A
74.1	10.1	-	CONTINUE	-	-	-	T
81.1	10.1	-	GO	ON	-	-	A
84.1	10.1	-	GO	ON WITH	-	-	A
86.1	10.1	-	RETURN	HOME	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	10.1	-	CONTINUE	-	-	-	T
24.2	10.1	-	CONTINUE	-	-	-	T
25.2	10.1	-	CONTINUE	-	-	-	T
26.2	10.1	-	RETURN?	BACK	-	-	P
30.2	10.1	-	CONTINUE	-	-	-	T
31.2	10.1	-	CONTINUE	-	-	-	T
33.2	10.1	-	CONTINUE	-	-	-	T
34.2	10.1	-	COME	BACK	-	-	P
35.2	10.1	START	GO	-	-	-	A
37.2	10.1	-	RUN	-	GO	HOME	M
39.2	10.1	START	CONTINUE	-	-	-	T
40.2	10.1	-	START	-	GO	-	T
41.2	10.1	START	GO	HOME	-	-	A
42.2	10.1	-	GO	-	COME	BACK	A
44.2	10.1	-	CONTINUE	-	-	-	T
45.2	10.1	-	GO	ON	-	-	A
50.2	10.1	-	GET	-	-	-	A
63.2	10.1	-	COME	BACK	-	-	P
65.2	10.1	-	GET	HOME	-	-	A
68.2	10.1	-	CONTINUE	-	-	-	T
74.2	10.1	-	HURRY	TO	-	-	M
78.2	10.1	-	CONTINUE	-	-	-	T
79.2	10.1	-	TAKE	-	-	-	P
81.2	10.1	-	GET	TO	-	-	A
83.2	10.1	START	GO	HOME	-	-	A
84.2	10.1	-	CONTINUE	-	-	-	T
87.2	10.1	-	FOLLOW	-	-	-	P

(11) But he STAGGERED BACK for a moment....

N A T I V E S P E A K E R S

MT	101	11.-
	102	11.stalled
	103	11.(met by madman)
	104	11.came back few steps
	105	11.(came to)
	106	11.(met)
	107	11.(saw)
	108	11.(met) pushed out of road..tried
	109	11.hesitated [to run away
MT	201	11.passed by
	202	11.got past him
	203	11.staggered
	204	11.-
	205	11.?
	206	11.jumped back
	207	11.bumped into
	208	11.met this man [JUMP TO 16?]
	209	11.-
	210	11.-
	211	11.-
	212	11.stopped for a minute
	213	11.-
	214	11.-
	215	11.-
	216	11.-
	217	11.(met friend [!]) ran on
	218	11.went back a few steps
	219	11.staggered back
	220	11.-
	221	11.-
	222	11.?meets up with
	223	11.(met) ran away
	224	11.ran

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	11.0	-	TAKE	BACK	RUN	-	X
33.1	11.0	-	RUN	-	-	-	M
36.1	11.0	-	GO	-	MEET	-	A
37.1	11.0	START	RUN	-	-	-	M
38.1	11.0	-	STOP	-	TURN	BACK	T
39.1	11.0	-	RUN	AFTER	-	-	M
40.1	11.0	-	RUN	-	-	-	M
42.1	11.0	-	SLOW	BACK	-	-	M
46.1	11.0	-	RUN	AWAY	-	-	M
47.1	11.0	DECIDE	ESCAPE	FROM	-	-	P
48.1	11.0	TRY	GO	BACK	-	-	A
53.1	11.0	START	RUN	-	-	-	M
54.1	11.0	DECIDE	RUN	-	-	-	M
55.1	11.0	-	RUN	BEHIND	ESCAPE	-	M
56.1	11.0	-	RUN	-	-	-	M
58.1	11.0	-	RUN	VERY FAST	-	-	M
62.1	11.0	-	RUN	VERY FAST	-	-	M
63.1	11.0	-	GO	BACKWARDS	-	-	A
64.1	11.0	DECIDE	TURN	BACK	-	-	P
66.1	11.0	-	COME	BACK	-	-	P
67.1	11.0	-	RUN	-	-	-	M
68.1	11.0	HAVE TO	RUN	-	-	-	M
69.1	11.0	-	RUN	-	-	-	M
71.1	11.0	-	RUN	BACK	-	-	M
72.1	11.0	-	ESCAPE	-	-	-	M
74.1	11.0	-	RUN	-	-	-	M
75.1	11.0	-	TAKE	-	-	-	P
76.1	11.0	FORCE	DRAW	BACK	-	-	X
77.1	11.0	-	RUN	AWAY	-	-	M
78.1	11.0	-	RUN	-	-	-	M
79.1	11.0	-	GO	BACKWARDS	-	-	A
80.1	11.0	-	RUN	-	-	-	M
81.1	11.0	-	RUN	BACK	-	-	M
82.1	11.0	-	RUN	BACK	-	-	M
83.1	11.0	-	PASS	-	-	-	P
84.1	11.0	DECIDE	RUN	BACK	-	-	M
85.1	11.0	-	MOVE	BEHINDABIT	-	-	A
86.1	11.0	START	MOVE	BEHIND	-	-	A

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
35.2	11.0	START	RUN	-	-	-	M
37.2	11.0	-	RUN	-	-	-	M
38.2	11.0	-	TURN	BACK	SEE	-	P
40.2	11.0	-	RUN	BACK	-	-	M
41.2	11.0	-	RUN	-	-	-	M
46.2	11.0	-	PASS	BESIDE	-	-	P
48.2	11.0	-	TURN	-	START WALK	-	P
49.2	11.0	-	RUN	BACK	-	-	M
50.2	11.0	-	RUN	-	-	-	M
51.2	11.0	HAVE TO	TAKE	-	-	-	P
53.2	11.0	-	GO	BACK	-	-	A
54.2	11.0	-	RUSH	-	-	-	M
56.2	11.0	BEGIN	RUN	BACK	-	-	M
62.2	11.0	DECIDE	RUN	-	-	-	M
64.2	11.0	-	TURN	BACK	-	-	P
65.2	11.0	-	TURN	BACK	RUN	FAST	P
66.2	11.0	MAKE	RUN	BACK	-	-	M
67.2	11.0	-	STOP	-	-	-	T
68.2	11.0	HAVE TO	RUN	-	-	-	M
69.2	11.0	-	LEAN	BACK	START RUN	-	M
71.2	11.0	-	RUN	BACKWARD	-	-	M
72.2	11.0	-	STAGGER	-	-	-	M
73.2	11.0	-	RUN	-	-	-	M
74.2	11.0	-	STAND	-	-	-	X
75.2	11.0	-	TAKE	-	-	-	P
76.2	11.0	-	STAGGER	-	-	-	M
78.2	11.0	-	RUN	-	-	-	M
81.2	11.0	DECIDE	TURN	BACK	RUN	-	P
82.2	11.0	START	RUN	BACK	-	-	M
84.2	11.0	-	HESITATE	BACK	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	11.0	TRY	RUN	-	-	-	M
22.1	11.0	-	RUN	-	-	-	M
23.1	11.0	-	RUN	-	-	-	M
25.1	11.0	-	GO	-	-	-	A
28.1	11.0	-	FIND	-	-	-	P
31.1	11.0	-	PASS	-	-	-	P
32.1	11.0	-	PASS	AWAY	LEAVE	-	P
35.1	11.0	-	RUN	AWAY	-	-	M
36.1	11.0	-	RUN	-	-	-	M
40.1	11.0	-	RUN	VERY FAST	-	-	M
42.1	11.0	START	RUN	-	-	-	M
43.1	11.0	-	CONTINUE	-	-	-	T

62.1	11.0	-	DODGE	-	-	-	M
64.1	11.0	START	RUN	-	-	-	M
67.1	11.0	-	PASS	-	-	-	P
68.1	11.0	-	RUN	AWAY	-	-	M
69.1	11.0	-	CONTINUE	-	-	-	T
71.1	11.0	DECIDE	RUN	-	-	-	M
72.1	11.0	-	RUN	-	-	-	M
74.1	11.0	-	LEAVE	-	-	-	P
76.1	11.0	DECIDE	RUSH	-	-	-	M
77.1	11.0	-	RUN	AWAY	-	-	M
78.1	11.0	DECIDE	RUN	AWAY	-	-	M
79.1	11.0	-	AVOID	-	RUN	-	X
81.1	11.0	-	LEAVE	-	-	-	P
83.1	11.0	HAVE TO	TURN	ASIDE	-	-	P
85.1	11.0	-	RUN	AWAY	-	-	M
86.1	11.0	-	COME	BACK	-	-	P
88.1	11.0	-	RUN	-	-	-	M

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
25.2	11.0	-	RUN	-	-	-	M
27.2	11.0	-	STOP	-	-	-	X
28.2	11.0	-	PASS	THROUGH	-	-	P
31.2	11.0	-	FIND	-	-	-	P
32.2	11.0	-	LEAVE	-	GO	TO	P
34.2	11.0	DECIDE	RUN	-	-	-	M
37.2	11.0	-	CARRY	ON	-	-	T
40.2	11.0	-	RUN	FROM	-	-	M
42.2	11.0	-	RUN	FASTER	-	-	M

62.2	11.0	-	COME	BACK	-	-	P
63.2	11.0	-	STAGGER	BACK	-	-	M
64.2	11.0	-	GIVE WAY	TO	-	-	X
65.2	11.0	-	STOP	-	-	-	T
66.2	11.0	-	LEAVE	-	-	-	P
68.2	11.0	-	STAGGER	-	-	-	M
69.2	11.0	-	RUN	ACROSS	PASS	-	M
71.2	11.0	-	GO	PAST	-	-	A
73.2	11.0	-	GIVE WAY	-	-	-	X
76.2	11.0	-	LEAVE	-	-	-	P
77.2	11.0	TRY	AVOID	-	-	-	X
78.2	11.0	-	?	-	-	-	?
79.2	11.0	-	RUN	-	-	-	M
81.2	11.0	-	WALK	ON	-	-	M
83.2	11.0	HAVE TO	HIDE	ASIDE	-	-	M
85.2	11.0	DECIDE	RUN	-	-	-	M
86.2	11.0	-	?	-	-	-	?
87.2	11.0	-	RUN	OVER	PASS	BY	M
88.2	11.0	HAVE TO	TURN	BACK	-	-	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	11.0	START	RUN	-	-	-	M
23.1	11.0	-	RUN	BACKWARD	ESCAPE	-	M
24.1	11.0	TRY	RUN	-	-	-	M
25.1	11.0	START	GO	BACK	-	-	A
26.1	11.0	-	RUN	BACKWARDS	-	-	M
28.1	11.0	-	RUN	FAST	-	-	M
30.1	11.0	-	CONTINUE	-	-	-	T
33.1	11.0	DECIDE	GO	BACK	-	-	A
34.1	11.0	-	RUN	AWAY	-	-	M
35.1	11.0	-	RUN	-	-	-	M
37.1	11.0	-	RUN	BACK	-	-	M
40.1	11.0	-	MOVE	BACKWARDS	-	-	A
41.1	11.0	-	RUN	BACKWARD	-	-	M
43.1	11.0	START	GO	-	-	-	A
45.1	11.0	-	GO	ON	-	-	A
46.1	11.0	-	COME	BACK	RUN	-	P
47.1	11.0	-	?	-	GO	BACK	?
51.1	11.0	-	GO	BEHIND	-	-	A
62.1	11.0	-	CONTINUE	-	-	-	T
65.1	11.0	TRY	RUN	-	-	-	M
66.1	11.0	-	HURRY	PAST	-	-	M
68.1	11.0	-	RUN	-	-	-	M
69.1	11.0	HAVE TO	TURN	BACK	RUN	-	P
72.1	11.0	-	BUMP	INTO	PASS	-	M
73.1	11.0	-	TAKEONHEEL	-	START RUN	-	X
74.1	11.0	HAVE TO	TRIP?	-	-	-	M
75.1	11.0	-	LEAVE	-	RUN	-	P
82.1	11.0	-	PASS	-	-	-	P
83.1	11.0	-	PASS	-	-	-	P
84.1	11.0	-	TURN	BACKWARDS	-	-	P
85.1	11.0	-	RETREAT	BACK	RUN	-	P
86.1	11.0	TRY	ESCAPE	FROM	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	11.0	DECIDE	GO	BACK	-	-	A
26.2	11.0	-	PASS	-	-	-	P
28.2	11.0	-	RUN	FAST	-	-	M
34.2	11.0	-	RUN	-	-	-	M
35.2	11.0	-	RUN	-	-	-	M
40.2	11.0	-	MOVE	BACKWARDS	-	-	A
41.2	11.0	-	RUN	AWAY	-	-	M
44.2	11.0	-	RUN	-	-	-	M
45.2	11.0	MANAGE	PASS	-	-	-	P
46.2	11.0	-	RUN	-	-	-	M
47.2	11.0	-	RUN	FAST	COME	BACK	M
51.2	11.0	-	TURN	BACK	-	-	P
65.2	11.0	-	HESITATE	-	-	-	M
66.2	11.0	-	STOP	A LITTLE	-	-	T
68.2	11.0	-	CONTINUE	-	-	-	T
69.2	11.0	-	STAGGER	BACK	-	-	M
70.2	11.0	-	RUN	AWAY	-	-	M
71.2	11.0	-	STAGGER	BACKWARDS	-	-	M
73.2	11.0	-	TAKEONHEEL	-	-	-	X
74.2	11.0	-	TURN	BACK	-	-	P
78.2	11.0	-	TURN	BACK?	-	-	P
82.2	11.0	-	PASS	BY	-	-	P
83.2	11.0	-	PASS	-	-	-	P

(11) ....as the village madman RAN PAST him

N A T I V E S P E A K E R S

MT	101	111.(just about) ran over him
	102	111.-
	103	111.-
	104	111.coming round running [thief]
	105	111.-
	106	111.-
	107	111.-
	108	111.-
	109	111.ran past
MT	201	111.-
	202	111.sort of stopped him
	203	111.-
	204	111.passed him
	205	111.-
	206	111.ran past
	207	111.-
	208	111.-
	209	111.ran past
	210	111.ran round him
	211	111.came past
	212	111.rushed past
	213	111.-
	214	111.chased J away
	215	111.-
	216	111.ran straight past him
	217	111.-
	218	111.came
	219	111.rushed past
	220	111.ran right past him
	221	111.-
	222	111.running past him
	223	111.-
	224	111.coming

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	11.1	-	FOLLOW	-	-	-	P
34.1	11.1	START	CHASE	AWAY	-	-	P
35.1	11.1	-	FOLLOW	-	-	-	P
36.1	11.1	-	CHASE	AWAY	-	-	P
37.1	11.1	-	COME	-	RUN	TOWARDS	P
39.1	11.1	-	CHASE	-	-	-	P
40.1	11.1	-	CHASE	-	-	-	P
41.1	11.1	-	CHASE	-	-	-	P
42.1	11.1	-	RUN	-	-	-	M
46.1	11.1	-	CHASE	-	-	-	P
49.1	11.1	-	CHASE	-	-	-	P
50.1	11.1	-	CHASE	-	-	-	P
51.1	11.1	-	CHASE	-	-	-	P
52.1	11.1	-	CHASE	BACK	-	-	P
54.1	11.1	-	CHASE	-	-	-	P
56.1	11.1	BEGIN	CHASE	-	-	-	P
57.1	11.1	-	CHASE	-	-	-	P
58.1	11.1	-	CHASE	AWAY	-	-	P
61.1	11.1	-	CHASE	-	-	-	P
62.1	11.1	-	CHASE	-	-	-	P
66.1	11.1	-	RUN	AFTER	-	-	M
67.1	11.1	START	CHASE	-	-	-	P
69.1	11.1	START	CHASE	-	-	-	P
73.1	11.1	-	RUN	-	-	-	M
74.1	11.1	-	CHASE	-	-	-	P
78.1	11.1	-	RUN	AFTER	-	-	M
80.1	11.1	START	CHASE	-	-	-	P
81.1	11.1	START	CHASE	-	-	-	P
82.1	11.1	-	CHASE	-	-	-	P
85.1	11.1	TRY	CHASE	-	-	-	P

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	11.1	-	FOLLOW	-	-	-	P
34.2	11.1	START	CHASE	AWAY	-	-	P
36.2	11.1	-	CHASE	-	-	-	P
37.2	11.1	-	COME	-	RUN	FORWARD	P
38.2	11.1	-	RUN	AFTER	-	-	M
39.2	11.1	-	CHASE	-	-	-	P
42.2	11.1	-	RUN	-	-	-	M
47.2	11.1	DECIDE	CHASE	-	-	-	P
52.2	11.1	-	PASS	BY	-	-	P
54.2	11.1	-	WALK	PAST	-	-	M
55.2	11.1	-	PASS	-	-	-	P
57.2	11.1	-	COME	-	-	-	P
58.2	11.1	-	CHASE	AWAY	-	-	P
61.2	11.1	-	RUN	VERY FAST	-	-	M
62.2	11.1	-	GIVE PUSH?	-	-	-	X
65.2	11.1	-	CHASE	-	-	-	P
67.2	11.1	-	RUN	PAST	-	-	M
74.2	11.1	-	RUN	PAST	-	-	M
75.2	11.1	HAVE TO	SEND	BACK	-	-	?
76.2	11.1	-	RUN	PAST	-	-	M
78.2	11.1	-	RUN	AFTER	-	-	M
80.2	11.1	-	RUN	PAST	-	-	M
81.2	11.1	DECIDE	RUN	AFTER	-	-	M
82.2	11.1	-	CHASE	-	-	-	P
83.2	11.1	-	RUSH	PAST	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
29.1	11.1 -	PASS	BY	-	-	P
38.1	11.1 -	JUMP	-	-	-	M
41.1	11.1 -	CHASE	-	-	-	P
44.1	11.1 -	RUN	OFF	-	-	M
45.1	11.1 -	FOLLOW	-	RUN	-	P
74.1	11.1 -	CONTINUE	-	-	-	T
78.1	11.1 -	PASS	-	-	-	P
85.1	11.1 -	PASS	-	-	-	P
88.1	11.1 -	CHASE	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	11.1 -	RUN	-	-	-	M
29.2	11.1 -	RUN	BEFORE	-	-	M
38.2	11.1 -	RUN	-	-	-	M
45.2	11.1 -	RUSH	AWAY	-	-	M
61.2	11.1 -	RUN	PAST	-	-	M
63.2	11.1 -	COME	-	RUN	-	P
64.2	11.1 -	RUSH	PAST	-	-	M
68.2	11.1 -	RUN	-	-	-	M
73.2	11.1 -	PASS	-	-	-	P
83.2	11.1 -	RUN	ALONG	-	-	M

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.1	11.1	TRY	PASS	-	-	-	P
26.1	11.1	WANT	PASS	-	CHASE	-	P
30.1	11.1	-	RUN	PAST	-	-	M
32.1	11.1	-	RUN	PAST	-	-	M
34.1	11.1	-	RUN	INTO	-	-	M
36.1	11.1	-	RUN	-	-	-	M
42.1	11.1	-	COME	-	WANTTOPASS	-	P
50.1	11.1	WANT	PASS	-	-	-	P
61.1	11.1	-	COME	FROM	-	-	P
66.1	11.1	-	BUMP	INTO	-	-	X
67.1	11.1	-	CHASE	-	-	-	P
69.1	11.1	-	APPROACH	-	-	-	P
70.1	11.1	-	CHASE	-	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
24.2	11.1	-	RUN	-	-	-	M
25.2	11.1	-	RUN	PAST	-	-	M
28.2	11.1	-	CHASE	-	-	-	P
30.2	11.1	-	RUN	PAST	-	-	M
31.2	11.1	-	PASS	-	-	-	P
36.2	11.1	-	PASS	-	RUN	-	P
38.2	11.1	-	RUN	TOWARDS	-	-	M
39.2	11.1	TRY	CHASE	-	-	-	P
42.2	11.1	-	COME	-	WANTTOPASS	INFRONTOF	P
44.2	11.1	-	CHASE	AFTER	-	-	P
46.2	11.1	-	RUN	TOWARD	-	-	M
47.2	11.1	START	FOLLOW	-	-	-	P
48.2	11.1	-	RUN	-	-	-	M
50.2	11.1	WANT	PASS	ASIDE OF	-	-	P
63.2	11.1	-	RUN	BESIDE	-	-	M
65.2	11.1	-	RUN	ACROSS	-	-	M
68.2	11.1	-	RUN	-	-	-	M
70.2	11.1	-	PASS	BY	-	-	P
72.2	11.1	-	BUMP	INTO	-	-	X
81.2	11.1	-	PASS	-	-	-	P

(12) When he CAME TO a shallow stream further on....

N A T I V E S P E A K E R S

MT 101 12.came to
102 12.came to little stream
103 12.came to river
104 12.came to deep river
105 12.-
106 12.-
107 12.-
108 12.came to stream
109 12.came to river
MT 201 12.-
202 12.-
203 12.came to small stream
204 12.-
205 12.came to
206 12.-
207 12.came to small river
208 12.-
209 12.came to a stream
210 12.came to shallow stream
211 12.-
212 12.continued
213 12.-
214 12.-
215 12.-
216 12.came to a river
217 12.(there was a big river)
218 12.came to a shallow stream
219 12.-
220 12.(walked on)
221 12.-
222 12.comes to shallow river
223 12.-
224 12.-

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	12.0	-	GET	TO	-	-	A
23.1	12.1	-	FIND	-	-	-	P
24.1	12.0	-	GO	-	-	-	A
29.1	12.0	-	GO	-	-	-	A
31.1	12.0	-	REACH	-	-	-	P
32.1	12.0	-	STEP	ON	-	-	M
33.1	12.0	-	FIND	-	-	-	P
35.1	12.0	-	FIND	-	-	-	P
36.1	12.0	-	PASS	-	-	-	P
38.1	12.0	-	REACH	-	-	-	P
39.1	12.0	-	RUN	UP TO	-	-	M
42.1	12.0	-	MEET	-	-	-	X
44.1	12.0	-	GET	-	-	-	A
45.1	12.0	-	FOLLOW	-	-	-	P
62.1	12.0	-	GO	TO	-	-	A
64.1	12.0	-	REACH	-	-	-	P
65.1	12.0	-	RUN	-	-	-	M
66.1	12.0	-	SEE	-	-	-	X
67.1	12.0	-	REACH	-	-	-	P
69.1	12.0	-	COME	ACROSS	-	-	P
71.1	12.0	-	GO	ON	-	-	A
72.1	12.0	-	GO	-	-	-	A
73.1	12.0	-	REACH	TO	-	-	P
74.1	12.0	-	COME	ACROSS	-	-	P
75.1	12.0	-	REACH	-	-	-	P
77.1	12.0	-	REACH	-	-	-	P
78.1	12.0	-	MEET	-	-	-	X
79.1	12.0	-	FIND	IN	-	-	P
81.1	12.0	-	FIND	-	-	-	P
83.1	12.0	-	CONTINUE	-	-	-	T
84.1	12.0	-	FIND	-	-	-	P
87.1	12.0	-	GO	-	-	-	A

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	12.0	-	GO	TO	-	-	A
22.2	12.0	-	GO	-	REACH	-	A
23.2	12.0	-	GO	-	-	-	A
24.2	12.0	-	REACH	AT	-	-	P
25.2	12.0	-	FIND	-	-	-	P
28.2	12.0	-	REACH	NEAR	-	-	P
29.2	12.0	-	WALK	ALONG	-	-	M
32.2	12.0	-	REACH	-	-	-	P
33.2	12.0	-	GO	-	-	-	A
34.2	12.0	-	COME	TO	-	-	P
35.2	12.0	-	FIND	-	-	-	P
37.2	12.0	-	SEE	-	-	-	X
38.2	12.0	-	REACH	-	-	-	P
39.2	12.0	-	RUN	INTO	-	-	M
41.2	12.0	-	REACH	-	-	-	P
43.2	12.0	-	REACH	-	-	-	P
45.2	12.0	-	FIND	-	-	-	P
61.2	12.0	-	GO	-	-	-	A
62.2	12.0	-	REACH	-	-	-	P
64.2	12.0	-	REACH	-	-	-	P
69.2	12.0	-	COME	TO	-	-	P
71.2	12.0	-	FOLLOW	-	-	-	P
72.2	12.0	-	MEET	-	-	-	X
73.2	12.0	-	REACH	-	-	-	P
76.2	12.0	-	GET	-	-	-	A
77.2	12.0	-	REACH	-	-	-	P
78.2	12.0	-	?	-	-	-	?
79.2	12.0	-	FIND	-	-	-	P
81.2	12.0	-	FIND	-	-	-	P
82.2	12.0	-	REACH	-	-	-	P
83.2	12.0	-	COME	TO	-	-	P
84.2	12.0	-	COME	ACROSS	-	-	P
86.2	12.0	-	MEET	-	-	-	X
87.2	12.0	-	FIND	-	-	-	P
88.2	12.0	-	RUN	-	-	-	M

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	12.0	-	REACH	AT	-	-	P
34.1	12.0	-	FIND	-	-	-	P
35.1	12.0	-	FIND	IN	-	-	P
36.1	12.0	-	GO	TO	-	-	A
37.1	12.0	-	REACH	-	-	-	P
38.1	12.0	START	RUN	-	-	-	M
39.1	12.0	-	COME	TO	-	-	P
40.1	12.0	-	FIND	-	-	-	P
41.1	12.0	-	FIND	IN	-	-	P
42.1	12.0	-	FIND	SELF IN	-	-	P
46.1	12.0	-	?	-	-	-	?
47.1	12.0	-	REACH	-	-	-	P
48.1	12.0	-	FALL	INTO	-	-	P
50.1	12.0	-	RUN	-	-	-	M
51.1	12.0	-	GO	-	-	-	A
52.1	12.0	-	FOLLOW	-	-	-	P
54.1	12.0	-	FIND	SELF IN	-	-	P
55.1	12.0	-	REACH	-	-	-	P
56.1	12.0	-	REACH	-	-	-	P
57.1	12.0	-	COME	TO	-	-	P
61.1	12.0	-	COME	TO	-	-	P
62.1	12.0	-	COME	TO	-	-	P
63.1	12.0	-	FIND	-	-	-	P
64.1	12.0	-	TAKE	-	-	-	P
67.1	12.0	-	REACH	-	-	-	P
68.1	12.0	-	REACH	-	-	-	P
69.1	12.0	-	REACH	-	-	-	P
72.1	12.0	-	FIND	-	-	-	P
73.1	12.0	-	FIND	SELF IN	-	-	P
74.1	12.0	-	REACH	-	-	-	P
75.1	12.0	-	GO	-	-	-	A
76.1	12.0	-	FIND	-	-	-	P
77.1	12.0	-	REACH	-	-	-	P
78.1	12.0	-	COME	TO	-	-	P
81.1	12.0	-	REACH	-	-	-	P
82.1	12.0	-	COME	TO	-	-	P
83.1	12.0	-	FIND	-	-	-	P
84.1	12.0	-	REACH	-	-	-	P
85.1	12.0	HAVE	CROSS	-	-	-	P
86.1	12.0	-	GET	-	-	-	A

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.2	12.0	-	COME	TO	-	-	P
34.2	12.0	-	REACH	AT	-	-	P
35.2	12.0	-	COME	INTO	-	-	P
36.2	12.0	-	RUN	UP TO	-	-	M
37.2	12.0	-	REACH	-	-	-	P
38.2	12.0	-	RUN	UP TO	-	-	M
39.2	12.0	-	REACH	-	-	-	P
41.2	12.0	-	FIND	IN	-	-	P
42.2	12.0	-	FIND	SELF	-	-	P
47.2	12.0	-	REACH	-	-	-	P
48.2	12.0	-	WALK	INTO	-	-	M
50.2	12.0	-	COME	ACROSS	-	-	P
51.2	12.0	-	COME	TO	-	-	P
52.2	12.0	-	COME	TO	-	-	P
53.2	12.0	-	COME	ACROSS	-	-	P
54.2	12.0	-	FIND	SELF ON	-	-	P
55.2	12.0	-	COME	TOWARDS	-	-	P
56.2	12.0	-	COME	TO	-	-	P
57.2	12.0	-	COME	TO	-	-	P
58.2	12.0	-	RUN	-	-	-	M
61.2	12.0	-	COME	ACROSS	-	-	P
62.2	12.0	-	COME	TO	-	-	P
64.2	12.0	-	?	-	-	-	?
65.2	12.0	-	COME	TO	-	-	P
66.2	12.0	-	GO	WITH	-	-	A
67.2	12.0	-	REACH	-	-	-	P
68.2	12.0	-	COME	ACROSS	-	-	P
69.2	12.0	-	REACH	-	-	-	P
72.2	12.0	-	FIND	-	-	-	P
73.2	12.0	-	COME	TO	-	-	P
74.2	12.0	-	REACH	-	-	-	P
77.2	12.0	-	REACH	-	-	-	P
78.2	12.0	-	COME	TO	-	-	P
79.2	12.0	-	PASS	THROUGH	-	-	P
81.2	12.0	-	REACH	-	-	-	P
82.2	12.0	-	GET	-	-	-	A
84.2	12.0	-	REACH	-	-	-	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	12.0	-	REACH	-	-	-	P
22.1	12.0	-	COME	ACROSS	-	-	P
23.1	12.0	-	REACH	-	-	-	P
24.1	12.0	-	SEE	-	-	-	X
25.1	12.0	-	FIND	-	-	-	P
26.1	12.0	-	REACH	-	-	-	P
27.1	12.0	-	RUN	-	-	-	M
28.1	12.0	-	REACH	-	-	-	P
30.1	12.0	-	REACH	-	-	-	P
32.1	12.0	-	RUN	-	-	-	M
33.1	12.0	-	GO	ACROSS	-	-	A
35.1	12.0	-	REACH	AT	-	-	P
37.1	12.0	-	REACH	-	-	-	P
39.1	12.0	-	GO	TO	-	-	A
42.1	12.0	-	GO	-	GET	-	A
43.1	12.0	-	REACH	-	-	-	P
45.1	12.0	-	REACH	-	-	-	P
46.1	12.0	-	COME	ACROSS	-	-	P
47.1	12.0	-	REACH	NEAR	-	-	P
48.1	12.0	-	GO	-	-	-	A
49.1	12.0	-	REACH	-	-	-	P
50.1	12.0	-	REACH	-	-	-	P
51.1	12.0	-	REACH	AT	-	-	P
62.1	12.0	-	REACH	-	-	-	P
63.1	12.0	-	GO	-	-	-	A
64.1	12.0	-	REACH	-	-	-	P
66.1	12.0	-	REACH	-	-	-	P
68.1	12.0	-	COME	ACROSS	-	-	P
69.1	12.0	-	FIND	-	-	-	P
70.1	12.0	-	FIND	IN	-	-	P
71.1	12.0	-	GO	UP TO	-	-	A
73.1	12.0	-	FIND	-	-	-	P
74.1	12.0	-	REACH	ON	-	-	P
75.1	12.0	-	COME	-	-	-	P
81.1	12.0	-	REACH	-	-	-	P
82.1	12.0	-	REACH	-	-	-	P
84.1	12.0	-	GET	ON	-	-	A
86.1	12.0	-	RUN	-	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	12.0	-	COME	BACK TO	-	-	P
22.2	12.0	-	FIND	-	-	-	P
24.2	12.0	-	REACH	AT	-	-	P
25.2	12.0	-	REACH	-	-	-	P
26.2	12.0	-	FIND	-	-	-	P
27.2	12.0	-	GO	-	-	-	A
28.2	12.0	-	REACH	-	-	-	P
29.2	12.0	-	REACH	AT	-	-	P
30.2	12.0	-	REACH	-	-	-	P
31.2	12.0	-	GO	-	-	-	A
33.2	12.0	-	REACH	AT	-	-	P
35.2	12.0	-	REACH	-	-	-	P
36.2	12.0	-	REACH	-	-	-	P
37.2	12.0	-	RUN	-	-	-	M
38.2	12.0	-	GO	-	-	-	A
39.2	12.0	-	REACH	AT	-	-	P
41.2	12.0	-	REACH	TO	-	-	P
42.2	12.0	-	REACH	-	-	-	P
43.2	12.0	-	REACH	AT	-	-	P
45.2	12.0	-	COME	ACROSS	-	-	P
46.2	12.0	-	COME	ACROSS	-	-	P
47.2	12.0	-	REACH	-	-	-	P
49.2	12.0	-	GO	ON	-	-	A
50.2	12.0	-	REACH	-	-	-	P
51.2	12.0	-	GO	-	-	-	A
61.2	12.0	-	PICK?	-	-	-	X
63.2	12.0	-	REACH	-	-	-	P
65.2	12.0	-	REACH	-	-	-	P
66.2	12.0	-	REACH	-	-	-	P
67.2	12.0	-	REACH	AT	-	-	P
68.2	12.0	-	REACH	-	-	-	P
69.2	12.0	-	COME	BY	-	-	P
70.2	12.0	-	REACH	-	-	-	P
71.2	12.0	-	COME	NEAR	-	-	P
73.2	12.0	-	CROSS	-	-	-	P
74.2	12.0	-	REACH	-	-	-	P
75.2	12.0	-	GO	-	-	-	A
78.2	12.0	-	FIND	-	-	-	P
81.2	12.0	-	REACH	-	COME	ACROSS	P
82.2	12.0	-	GO	-	-	-	A
83.2	12.0	-	COME	ACROSS	-	-	P
84.2	12.0	-	COME	ACROSS	-	-	P
87.2	12.0	-	COME	-	-	-	P

(12) ....he WADED ACROSS it

N A T I V E S P E A K E R S

MT	101	121.waded through
	102	121.waded across
	103	121.waded over
	104	121.paddled through
	105	121.went across stream
	106	121.walked through river
	107	121.went over river
	108	121.had to wade in to go across
	109	121.waded through
MT	201	121.went over a river
	202	121.walked past
	203	121.walked through it
	204	121.paddled through a stream
	205	121.walked to get across
	206	121.climbed over (stream)
	207	121.-
	208	121.-
	209	121.waded across it
	210	121.waded through
	211	121.-
	212	121.waded through a stream
	213	121.-
	214	121.-
	215	121.-
	216	121.had to wade through it
	217	121.jumped on to rocks
	218	121.waded through it
	219	121.went across a stream
	220	121.waded through stream
	221	121.crossed over small river
	222	121.-
	223	121.crossed a stream
	224	121.jumped across burn

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	12.1	-	PASS	-	-	-	P
34.1	12.1	-	PASS	-	-	-	P
36.1	12.1	-	CROSS	-	-	-	P
37.1	12.1	-	CROSS	-	-	-	P
38.1	12.1	-	JUMP	INTO	-	-	M
39.1	12.1	-	PASS	THROUGH	-	-	P
40.1	12.1	DECIDE	PASS	ON	-	-	P
46.1	12.1	-	STRUGGLE	-	?	-	M
48.1	12.1	-	WADE	THROUGH	-	-	M
49.1	12.1	-	GO	INTO	-	-	A
50.1	12.1	-	CROSS	-	-	-	P
51.1	12.1	-	PASS	THROUGH	-	-	P
52.1	12.1	-	LAND	IN	-	-	P
53.1	12.1	-	JUMP	OVER	-	-	M
55.1	12.1	START	WALK	SLOW	CROSS	-	M
56.1	12.1	-	PASS	-	-	-	P
57.1	12.1	TRY	PASS	-	-	-	P
58.1	12.1	-	CROSS	-	-	-	P
61.1	12.1	-	PASS	ACROSS	-	-	P
63.1	12.1	DECIDE	PASS	ACROSS	-	-	P
64.1	12.1	DECIDE	WALK	OVER	-	-	M
66.1	12.1	-	RUN	ACROSS	-	-	M
67.1	12.1	TRY	WADE	THROUGH	-	-	M
68.1	12.1	-	CROSS	-	-	-	P
69.1	12.1	-	WADE	IN	PASS	BY	M
70.1	12.1	-	GO	THROUGH	-	-	A
72.1	12.1	-	CROSS	-	-	-	P
73.1	12.1	-	CROSS	-	-	-	P
74.1	12.1	-	WADE	THROUGH	-	-	M
75.1	12.1	-	PASS	THROUGH	-	-	P
76.1	12.1	DECIDE	WALK	ACROSS	-	-	M
77.1	12.1	-	ENTER	INTO	-	-	P
78.1	12.1	-	STEP	IN	WALK	OVER	M
79.1	12.1	-	PASS	THROUGH	-	-	P
80.1	12.1	-	ENTER	INTO	WALK	OVER	P
81.1	12.1	-	STEP LEGS	INTO	-	-	M
82.1	12.1	-	FOLLOW	-	-	-	P
83.1	12.1	-	CROSS	-	-	-	P
84.1	12.1	-	WALK	-	CROSS	-	M
86.1	12.1	DECIDE	WALK	ACROSS	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	12.1	-	RUN	THROUGH	-	-	M
33.2	12.1	-	WALK	OVER	-	-	M
34.2	12.1	-	PASS	-	-	-	P
35.2	12.1	-	ENTER	IN	CROSS	-	P
36.2	12.1	-	CROSS	-	-	-	P
37.2	12.1	-	PASS	THROUGH	-	-	P
38.2	12.1	-	JUMP	ON	-	-	M
40.2	12.1	-	GO	THROUGH	-	-	A
46.2	12.1	-	PASS	THROUGH	-	-	P
48.2	12.1	-	WADE	THROUGH	-	-	M
49.2	12.1	-	PASS	INTO	-	-	P
50.2	12.1	-	PASS	THROUGH	-	-	P
51.2	12.1	HAVE TO	PASS	THROUGH	-	-	P
52.2	12.1	-	PASS	OVER	-	-	P
53.2	12.1	DECIDE	GO	OVER	-	-	A
56.2	12.1	-	PASS	-	-	-	P
57.2	12.1	-	PASS	-	-	-	P
58.2	12.1	-	CROSS	-	-	-	P
62.2	12.1	-	WADE	THROUGH	-	-	M
63.2	12.1	-	PASS	OVER	-	-	P
64.2	12.1	WANT	JUMP	OVER	CROSS	OVER	M
65.2	12.1	TRY	PASS	-	-	-	P
66.2	12.1	-	CROSS	-	-	-	P
67.2	12.1	-	WADE	THROUGH	-	-	M
68.2	12.1	HAVE TO	PASS	-	-	-	P
69.2	12.1	-	STRUGGLE	OVER TO	-	-	M
71.2	12.1	-	SLIDE	-	-	-	M
72.2	12.1	-	WADE	-	-	-	M
73.2	12.1	-	CROSS	-	-	-	P
74.2	12.1	-	WADE	ACROSS	-	-	M
75.2	12.1	-	GO	PAST	-	-	A
76.2	12.1	-	WADE	ALONG ACRO	-	-	M
77.2	12.1	-	TREAD?	-	-	-	M
78.2	12.1	-	WALK	IN THROUGH	-	-	M
80.2	12.1	-	CROSS	-	-	-	P
81.2	12.1	-	TRAVEL	THROUGH	-	-	A
82.2	12.1	-	FOLLOW	-	-	-	P
83.2	12.1	-	JUMP	-	-	-	M
84.2	12.1	-	GO?	THROUGH	WALK	-	A

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	12.1	-	PASS	-	-	-	P
22.1	12.1	-	GO	THROUGH	-	-	A
23.1	12.1	-	CROSS	-	-	-	P
24.1	12.1	-	PASS	-	-	-	P
25.1	12.1	MANAGE	PASS	THROUGH	-	-	P
26.1	12.1	-	PASS	-	CROSS	-	P
28.1	12.1	-	PASS	THROUGH	FALL	INTO	P
29.1	12.1	-	PASS	THROUGH	-	-	P
31.1	12.1	-	RUN	-	-	-	M
33.1	12.1	-	CROSS	-	-	-	P
34.1	12.1	DECIDE	CRAWL	-	-	-	M
35.1	12.1	-	PASS	-	-	-	P
36.1	12.1	-	JUMP	IN	-	-	M
37.1	12.1	-	LIMP	-	-	-	M
38.1	12.1	-	CROSS	-	-	-	P
41.1	12.1	-	PASS	THROUGH	-	-	P
42.1	12.1	-	JUMP	OVER	-	-	M
43.1	12.1	-	PASS	-	-	-	P
44.1	12.1	-	STEP	ON	-	-	M
45.1	12.1	-	PASS	THROUGH	-	-	P
61.1	12.1	-	RUSH	ACROSS	-	-	M
62.1	12.1	-	CROSS	-	-	-	P
64.1	12.1	-	JUMP	OVER	-	-	M
65.1	12.1	-	CROSS	-	-	-	P
66.1	12.1	-	CROSS	-	-	-	P
67.1	12.1	-	CROSS	-	-	-	P
68.1	12.1	HAVE TO	CROSS	-	-	-	P
69.1	12.1	-	CROSS	-	-	-	P
72.1	12.1	-	CROSS	-	-	-	P
73.1	12.1	-	JUMP	OVER	-	-	M
74.1	12.1	-	JUMP	OVER	-	-	M
76.1	12.1	-	CROSS	OVER	-	-	P
77.1	12.1	-	JUMP	OVER	-	-	M
78.1	12.1	HAVE TO	PASS	THROUGH	-	-	P
79.1	12.1	-	GO	THROUGH	-	-	A
81.1	12.1	-	CROSS	-	-	-	P
82.1	12.1	-	JUMP	INTO	-	-	M
83.1	12.1	-	CROSS	-	WADE	THROUGH	P
84.1	12.1	-	CROSS	-	-	-	P
85.1	12.1	-	PASS	-	-	-	P
86.1	12.1	-	?	-	-	-	?
87.1	12.1	-	CROSS	-	-	-	P
88.1	12.1	-	FALL	DOWN	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	12.1	-	SCRAMBLE	-	PASS	-	M
22.2	12.1	-	GO	THROUGH	-	-	A
23.2	12.1	-	CROSS	-	-	-	P
24.2	12.1	DECIDE	CROSS	-	-	-	P
25.2	12.1	-	CROSS	-	-	-	P
27.2	12.1	-	CROSS	-	JUMP	-	P
31.2	12.1	-	CROSS	-	-	-	P
32.2	12.1	-	MOVE	THROUGH	-	-	A
33.2	12.1	-	CROSS	-	-	-	P
34.2	12.1	-	PASS	-	-	-	P
35.2	12.1	-	PASS	ACROSS	-	-	P
37.2	12.1	-	WADE	-	-	-	M
38.2	12.1	TRY	CROSS	-	-	-	P
39.2	12.1	START	PASS	INTO	-	-	P
40.2	12.1	-	COME	ACROSS	-	-	P
42.2	12.1	-	JUMP	OVER	-	-	M
45.2	12.1	-	LEAP	ON	-	-	M
46.2	12.1	-	CROSS	-	-	-	P
61.2	12.1	-	CROSS	-	-	-	P
63.2	12.1	-	WADE	TO	-	-	M
64.2	12.1	-	CROSS	OVER	-	-	P
65.2	12.1	-	JUMP	ON TO	-	-	M
66.2	12.1	-	PASS	-	-	-	P
68.2	12.1	HAVE TO	CROSS	-	-	-	P
69.2	12.0	STRUGGLE	PASS	-	-	-	P
71.2	12.1	-	JUMP	OVER	-	-	M
72.2	12.1	-	JUMP	-	GO CROSS	-	M
73.2	12.1	-	JUMP	OVER	-	-	M
76.2	12.1	-	GO	OVER	-	-	A
77.2	12.1	-	WADE	-	CROSS	OVER	M
78.2	12.1	-	?	-	-	-	?
79.2	12.1	-	CROSS	-	-	-	P
80.2	12.1	-	GO	ACROSS	-	-	A
81.2	12.1	-	CROSS	-	-	-	P
82.2	12.1	TRY	CROSS	OVER	-	-	P
83.2	12.1	-	WADE	THROUGH	-	-	M
84.2	12.1	TRY	CROSS	-	-	-	P
85.2	12.1	-	PASS	THROUGH	-	-	P
86.2	12.1	-	?	-	-	-	?
87.2	12.1	-	STEP	ON	GO	OVER	M
88.2	12.1	-	JUMP	INTO	-	-	M

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.1	12.1	-	CROSS	-	-	-	P
23.1	12.1	-	CROSS	-	-	-	P
24.1	12.1	-	WALK	IN	-	-	M
26.1	12.1	-	PASS	OVER	-	-	P
27.1	12.1	-	JUMP	-	-	-	M
28.1	12.1	-	PASS	-	-	-	P
30.1	12.1	-	CROSS	-	-	-	P
31.1	12.1	-	GO	ACROSS	-	-	A
32.1	12.1	-	CROSS	-	-	-	P
34.1	12.1	-	CROSS	-	-	-	P
35.1	12.1	-	STEP	ON	-	-	M
36.1	12.1	-	WALK	-	-	-	M
37.1	12.1	-	PASS	THROUGH	-	-	P
38.1	12.1	-	SKIP	-	FALL	-	M
39.1	12.1	-	PASS	-	-	-	P
40.1	12.1	TRY	ESCAPE	-	-	-	P
41.1	12.1	-	FOLLOW	-	-	-	P
42.1	12.1	-	PASS	THROUGH	-	-	P
43.1	12.1	-	CROSS	-	-	-	P
45.1	12.1	MANAGE	GO	THROUGH	-	-	A
46.1	12.1	-	JUMP	-	-	-	M
48.1	12.1	-	CROSS	-	-	-	P
49.1	12.1	-	JUMP	-	-	-	M
50.1	12.1	-	STEP	IN	CROSS	TO	M
51.1	12.1	-	CROSS?	-	-	-	P
61.1	12.1	-	JUMP	OVER	-	-	M
62.1	12.1	-	CROSS	-	-	-	P
63.1	12.1	-	JUMP	OVER	-	-	M
64.1	12.1	-	CROSS	-	-	-	P
66.1	12.1	-	PAVE?	THROUGH	-	-	X
67.1	12.1	-	CROSS	-	-	-	P
68.1	12.1	-	JUMP	-	-	-	M
69.1	12.1	MANAGE	CROSS	-	-	-	P
70.1	12.1	-	GO	THROUGH	-	-	A
72.1	12.1	-	CROSS	-	-	-	P
73.1	12.1	DEFEAT	CROSS	-	-	-	P
74.1	12.1	HAVE TO	WADE	THROUGH	-	-	M
75.1	12.1	-	CROSS	-	-	-	P
81.1	12.1	HAVE TO	CROSS	-	-	-	P
82.1	12.1	-	CROSS	-	-	-	P
83.1	12.1	-	PASS	THROUGH	-	-	P
84.1	12.1	TRY	WALK	ACROSS	-	-	M
85.1	12.1	TRY	JUMP	-	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	12.1	TRY	GET	OVER	-	-	A
22.2	12.1	-	CROSS	-	-	-	P
24.2	12.1	TRY	CROSS	-	-	-	P
26.2	12.1	-	WALK	THROUGH	-	-	M
27.2	12.1	-	CROSS	-	-	-	P
28.2	12.1	-	CROSS	-	-	-	P
29.2	12.1	-	PASS	THROUGH	-	-	P
30.2	12.1	-	CROSS	-	-	-	P
31.2	12.1	-	CROSS	-	-	-	P
33.2	12.1	-	PASS	-	-	-	P
34.2	12.1	-	WADE	ACROSS	-	-	M
35.2	12.1	TRY	STEP	IN	-	-	M
36.2	12.1	-	CROSS	-	-	-	P
37.2	12.1	-	PASS	-	-	-	P
38.2	12.1	-	JUMP	-	GET	INTO	M
41.2	12.1	-	FALL	DOWN	-	-	P
42.2	12.1	START	WALK	IN	-	-	M
43.2	12.1	-	CROSS	-	-	-	P
44.2	12.1	-	CROSS	-	-	-	P
45.2	12.1	MANAGE	PASS	-	-	-	P
46.2	12.1	-	PASS	-	-	-	P
47.2	12.1	-	PASS	INTO	-	-	P
48.2	12.1	-	GO	THROUGH	-	-	A
49.2	12.1	TRY	JUMP	-	-	-	M
50.2	12.1	TRY	STEP	IN	CROSS	OVER	M
51.2	12.1	-	PASS	-	-	-	P
61.2	12.1	-	STRUGGLE	THROUGH	-	-	M
63.2	12.1	DECIDE	GO	OVER	-	-	A
65.2	12.1	-	WADE	OVER	-	-	M
66.2	12.1	-	PAVE? WAY	THROUGH	-	-	X
67.2	12.1	HAVE TO	CROSS	-	-	-	P
68.2	12.1	-	CROSS	-	-	-	P
71.2	12.1	-	CROSS	-	-	-	P
72.2	12.1	-	CROSS	-	-	-	P
73.2	12.1	-	REACH	-	-	-	P
74.2	12.1	HAVE TO	WADE	ACROSS	-	-	M
75.2	12.1	-	WADE	THROUGH	-	-	M
78.2	12.1	-	CROSS	OVER	STRUGGLE	WITH	P
81.2	12.1	-	WADE	-	CROSS	-	M
82.2	12.1	-	CROSS	-	-	-	P
83.2	12.1	-	PASS	THROUGH	-	-	P
84.2	12.1	TRY	CROSS	TO	-	-	P
87.2	12.1	-	JUMP	INTO	-	-	M

(13) and SCRAMBLED UP the slope on the other side

N A T I V E S P E A K E R S

MT 101 13.scrambled up other side
102 13.had to ?trumble up
103 13.climbed up bank
104 13.climbed up....scrambling
105 13.climbed up verge
106 13.tried to get up hill..climbed up
107 13.ran up stones..scrambled over
108 13.got across
109 13.climbed up bank

MT 201 13.climbed up steep cliff
202 13.stumbled on -?-
203 13.? ?staggering
204 13.(up on to path)
205 13.climbed up
206 13.climbed up the steep hill
207 13.had to climb up mountain
208 13.-
209 13.climbed up along the sides
210 13.climbed up hill
211 13.-
212 13.climbed up steep hill
213 13.climbed up steep hill
214 13.started to climb up rocks
215 13.-
216 13.stumbled up on to river bank
217 13.got over
218 13.climbed up embankment
219 13.climbed up rocks
220 13.climbed up hill
221 13.climbed up slope
222 13.climbs up
223 13.climbed up other side
224 13.scampered up small slope

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	13.0	-	PASS	-	-	-	P
33.1	13.0	-	CLIMB	-	-	-	M
34.1	13.0	-	CONTINUE	-	-	-	T
35.1	13.0	DECIDE	CLIMB	OVER	-	-	M
36.1	13.0	-	CLIMB	-	-	-	M
37.1	13.0	-	CLIMB	OVER	-	-	M
38.1	13.0	-	CLIMB	-	-	-	M
39.1	13.0	-	CLIMB	-	-	-	M
40.1	13.0	-	PASS	-	CLIMBCRAWL	-	P
41.1	13.0	-	STUMBLE	-	-	-	M
42.1	13.0	-	CLIMB	-	-	-	M
47.1	13.0	MANAGE	CLIMB	-	-	-	M
48.1	13.0	-	CLIMB	-	-	-	M
49.1	13.0	-	CLIMB	-	-	-	M
50.1	13.0	-	CLIMB	ON TO	-	-	M
51.1	13.0	-	CLIMB	-	-	-	M
52.1	13.0	-	CLIMB	OVER	-	-	M
53.1	13.0	START	CLIMB	-	-	-	M
54.1	13.0	-	CLIMB	-	-	-	M
55.1	13.0	-	COME	ACROSS	START WALK	-	P
56.1	13.0	-	CLIMB	ON TO	-	-	M
58.1	13.0	-	JUMP	OVER	-	-	M
61.1	13.0	-	CLIMB	UP	CRAWL UP	-	M
62.1	13.0	DECIDE	CLIMB	UP	-	-	M
63.1	13.0	DECIDE	JUMP	OVER	-	-	M
66.1	13.0	-	CLIMB	-	-	-	M
68.1	13.0	-	CLIMB	ON	CRAWL	-	M
69.1	13.0	TRY	CLIMB	UP	-	-	M
70.1	13.0	-	DROP	-	-	-	M
71.1	13.0	-	FALL	-	-	-	P
72.1	13.0	-	CLIMB	-	-	-	M
73.1	13.0	-	CLIMB	-	-	-	M
74.1	13.0	-	CLIMB	-	-	-	M
75.1	13.0	-	CROSS	OVER	-	-	P
76.1	13.0	-	CLIMB	ON	-	-	M
77.1	13.0	-	JUMP	ON TO	-	-	M
78.1	13.0	-	CLIMB	OVER	-	-	M
79.1	13.0	-	CLIMB	-	-	-	M
80.1	13.0	-	SLIP	-	FALL	-	M
81.1	13.0	-	CLIMB	-	-	-	M
82.1	13.0	-	GO	-	CLIMB	-	A
83.1	13.0	START	CLIMB	SLOWLY	-	-	M
84.1	13.0	-	CLIMB	-	-	-	M
85.1	13.0	-	CLIMB	-	-	-	M
86.1	13.0	START	CLIMB	-	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	13.0	-	CLIMB	-	PUSH	-	M
33.2	13.0	-	CLIMB	-	-	-	M
34.2	13.0	-	CONTINUE	-	-	-	T
35.2	13.0	-	CRAWL	-	CLIMB	-	M
36.2	13.0	-	CLIMB	-	-	-	M
37.2	13.0	-	CLIMB	ON	-	-	M
39.2	13.0	-	CLIMB	-	-	-	M
40.2	13.0	-	CRAWL	-	CLIMB	UP	M
41.2	13.0	-	STRUGGLE	-	CRAWL?	-	M
42.2	13.0	-	SCRAMBLE	SLOWLY	-	-	M
46.2	13.0	-	CLIMB	-	-	-	M
47.2	13.0	DECIDE	CLIMB	-	-	-	M
48.2	13.0	-	CLIMB	-	-	-	M
49.2	13.0	-	CLIMB	UP	-	-	M
50.2	13.0	-	CLIMB	-	-	-	M
51.2	13.0	-	CLIMB	OVER	-	-	M
53.2	13.0	-	CLIMB	OVER	-	-	M
54.2	13.0	DECIDE	COME	OUT	-	-	P
55.2	13.0	START	CLIMB	-	-	-	M
58.2	13.0	-	JUMP	OVER	-	-	M
61.2	13.0	DECIDE	CRAWL	UP	-	-	M
62.2	13.0	-	SCRAMBLE	-	GET	THROUGH	M
63.2	13.0	DECIDE	CLIMB	OVER	-	-	M
64.2	13.0	-	SCRAMBLE	-	-	-	M
65.2	13.0	-	FALL	DOWN	-	-	P
66.2	13.0	TRY	CLIMB	UP	-	-	M
67.2	13.0	-	CREEP	THROUGH	-	-	M
68.2	13.0	HAVE TO	CRAWL	A BIT	-	-	M
69.2	13.0	-	CRAWL?	BEHIND	-	-	M
73.2	13.0	-	CLIMB	-	-	-	M
74.2	13.0	-	CRAWL	OVER	-	-	M
75.2	13.0	TRY	CROSS	-	-	-	P
76.2	13.0	-	CLIMB	OVER	-	-	M
77.2	13.0	-	GO	PAST	-	-	A
78.2	13.0	TRY	WALK	OVER	-	-	M
79.2	13.0	-	CLIMB	-	-	-	M
80.2	13.0	-	SLIP	DOWN	-	-	M
82.2	13.0	-	COME	TO	-	-	P
84.2	13.0	-	CLIMB	UP	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	13.0	TRY	PASS	-	-	-	P
22.1	13.0	-	CLIMB	-	-	-	M
24.1	13.0	-	CLIMB	UP	-	-	M
25.1	13.0	-	CLIMB	-	-	-	M
26.1	13.0	-	ASCEND	UP	-	-	P
28.1	13.0	-	CLIMB	-	-	-	M
29.1	13.0	-	CLIMB	UP	-	-	M
30.1	13.0	-	CLIMB	-	-	-	M
31.1	13.0	-	FALL	DOWN	-	-	P
32.1	13.0	TRY	CLIMB	-	FALL	DOWN	M
33.1	13.0	-	CLIMB	-	-	-	M
34.1	13.0	-	WAKE	UP	-	-	M
35.1	13.0	-	CRAWL	DOWN	CLIMB	-	M
36.1	13.0	-	COME	IN	CLIMB	-	P
37.1	13.0	-	SLIP	BACK	-	-	M
38.1	13.0	-	CRAWL	-	-	-	M
39.1	13.0	-	FALL	INTO	-	-	P
40.1	13.0	-	CLIMB	-	-	-	M
41.1	13.0	START	CLIMB	-	-	-	M
42.1	13.0	-	CLIMB	-	-	-	M
43.1	13.0	-	CLIMB	-	-	-	M
44.1	13.0	-	MOVE	-	CLIMB	-	A
45.1	13.0	-	CLIMB	-	-	-	M
46.1	13.0	-	CLIMB	-	-	-	M
61.1	13.0	-	CLIMB	UP	-	-	M
62.1	13.0	START	CLIMB	UP	-	-	M
64.1	13.0	-	CLIMB	-	-	-	M
65.1	13.0	-	CLIMB	-	-	-	M
66.1	13.0	-	CLIMB	-	-	-	M
67.1	13.0	START	CLIMB	-	-	-	M
68.1	13.0	-	GO	UPHILL	-	-	A
69.1	13.0	CONTINUE	CLIMB	-	-	-	M
71.1	13.0	DECIDE	CLIMB	-	-	-	M
72.1	13.0	-	CLIMB	-	-	-	M
73.1	13.0	TRY	CRAWL	OVER	-	-	M
74.1	13.0	-	CLIMB	-	-	-	M
75.1	13.0	-	CLIMB	-	-	-	M
76.1	13.0	-	CLIMB	OVER	-	-	M
77.1	13.0	-	CLIMB	UP	-	-	M
78.1	13.0	-	CLIMB	-	-	-	M
79.1	13.0	-	CLIMB	ON	-	-	M
81.1	13.0	-	CLIMB	-	-	-	M
82.1	13.0	STRUGGLE	CLIMB	-	-	-	M
83.1	13.0	-	CLIMB	UP	-	-	M
84.1	13.0	DECIDE	CLIMB	-	-	-	M
85.1	13.0	-	CLIMB	UP	-	-	M
86.1	13.0	-	CLIMB	-	-	-	M
87.1	13.0	-	CLIMB	-	-	-	M
88.1	13.0	STRUGGLE	FALL	AGAIN	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	13.0	-	SCRAMBLE	-	PASS	-	M
23.2	13.0	-	CLIMB	-	-	-	M
24.2	13.0	-	CLIMB	UP	-	-	M
25.2	13.0	-	CLIMB	-	-	-	M
27.2	13.0	-	CLIMB	UP	-	-	M
28.2	13.0	TRY	CLIMB	-	-	-	M
29.2	13.0	-	CLIMB	-	-	-	M
30.2	13.0	-	CLIMB	-	-	-	M
31.2	13.0	-	FALL	DOWN	-	-	P
32.2	13.0	TRY	CLIMB	OVER	-	-	M
33.2	13.0	START	CRAWL	-	-	-	M
34.2	13.0	-	CRAWL	ON	-	-	M
35.2	13.0	-	CRAWL	DOWN	CLIMB	-	M
37.2	13.0	-	SLIP	-	WALK	-	M
38.2	13.0	TRY	CRAWL	-	PASS	-	M
39.2	13.0	-	FALL	DOWN	-	-	P
40.2	13.0	-	CLIMB	-	-	-	M
41.2	13.0	TRY	SLIP	-	-	-	M
42.2	13.0	-	CLIMB	-	-	-	M
43.2	13.0	-	CLIMB	UP	-	-	M
44.2	13.0	START	CLIMB	-	-	-	M
45.2	13.0	-	CLIMB	-	-	-	M
46.2	13.0	-	CRAWL	-	-	-	M
61.2	13.0	-	CRAWL	UP	-	-	M
62.2	13.0	-	CRAWL	UP	-	-	M
63.2	13.0	-	FALL	DOWN	CLIMB	OVER	P
64.2	13.0	-	CLIMB	-	-	-	M
65.2	13.0	-	CREEP	UPHILL	-	-	M
66.2	13.0	-	GO	UP	-	-	A
68.2	13.0	-	GO	UPHILL	CRAWL	-	A
68.2	13.0	-	REACH	AT	-	-	P
71.2	13.0	-	FALL	DOWN	CRAWL	-	P
73.2	13.0	-	CRAWL	-	HELP PASS	-	M
76.2	13.0	STRUGGLE	GO	OVER	-	-	A
77.2	13.0	TRY	SCRAMBLE	OVER	CLIMB	UP	M
78.2	13.0	-	CLIMB	-	-	-	M
79.2	13.0	-	CLIMB	OVER	-	-	M
80.2	13.0	TRY	CLIMB	OVER	-	-	M
81.2	13.0	-	CLIMB	-	-	-	M
82.2	13.0	STRUGGLE	HOLD	ON	-	-	X
83.2	13.0	-	CLIMB	-	-	-	M
84.2	13.0	-	FALL	DOWN	-	-	P
85.2	13.0	-	CLIMB	-	FALL	DOWN	M
86.2	13.0	-	?	-	-	-	?
87.2	13.0	TRY	GO	-	SLIDECLIMB	-	A
88.2	13.0	TRY	CLIMB	ON TO	-	-	M

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	13.0	START	CLIMB	-	-	-	M
22.1	13.0	-	CLIMB	-	-	-	M
23.1	13.0	-	WALK?	ON	-	-	M
24.1	13.0	TRY	CLIMB	-	-	-	M
25.1	13.0	START	CRAWL	OVER	-	-	M
26.1	13.0	START	CLIMB	-	-	-	M
27.1	13.0	-	MOVE	UPWARDS	CRAWL	-	A
28.1	13.0	-	CLIMB	-	-	-	M
30.1	13.0	-	CLIMB	-	-	-	M
31.1	13.0	-	CLIMB	-	-	-	M
32.1	13.0	-	CLIMB	-	-	-	M
33.1	13.0	-	CLIMB	-	-	-	M
34.1	13.0	START	CLIMB	-	-	-	M
35.1	13.0	TRY	CLIMB	-	-	-	M
36.1	13.0	-	REACH	AT	WALK	SLOWLY	P
38.1	13.0	TRY	CLIMB	-	-	-	M
40.1	13.0	-	FALL	DOWN	-	-	P
42.1	13.0	-	PASS	-	-	-	P
43.1	13.0	START	CLIMB	-	-	-	M
45.1	13.0	START	CLIMB	-	-	-	M
46.1	13.0	-	CLIMB	ON	-	-	M
47.1	13.0	TRY	CLIMB	-	-	-	M
50.1	13.0	-	CLIMB	-	-	-	M
51.1	13.0	HAVE TO	CLIMB	-	-	-	M
61.1	13.0	-	CLIMB	OVER	-	-	M
62.1	13.0	-	GO	ON	-	-	A
63.1	13.0	-	CLIMB	UP	-	-	M
64.1	13.0	HAVE TO	CLIMB	-	-	-	M
65.1	13.0	TRY	CLIMB	OVER	-	-	M
66.1	13.0	START	CLIMB	-	-	-	M
67.1	13.0	HAVE TO	CLIMB	-	-	-	M
68.1	13.0	TRY	CLIMB	-	-	-	M
69.1	13.0	-	CLIMB	UPHILL	-	-	M
70.1	13.0	-	CLIMB	OVER	-	-	M
71.1	13.0	-	CLIMB	-	-	-	M
72.1	13.0	-	CLIMB	-	CRAWL	-	M
73.1	13.0	-	FIGHT WAY	-	-	-	M
74.1	13.0	-	CLIMB	-	-	-	M
75.1	13.0	-	CLIMB	-	-	-	M
81.1	13.0	-	GO	UPHILL	-	-	A
82.1	13.0	STRUGGLE	CLIMB	-	-	-	M
83.1	13.0	-	GO	UP	CLIMB	UP	A
84.1	13.0	-	CLIMB	-	-	-	M
85.1	13.0	-	FIND WAY	OUT	CREEP	ALONG	P
86.1	13.0	-	CLIMB	-	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	13.0	-	CLIMB	OVER	-	-	M
22.2	13.0	TRY	CLIMB	OVER	-	-	M
24.2	13.0	START	CRAWL	-	-	-	M
25.2	13.0	-	SCRAMBLE	OVER	-	-	M
27.2	13.0	-	CRAWL	-	-	-	M
28.2	13.0	-	CLIMB	-	-	-	M
30.2	13.0	-	CLIMB	-	-	-	M
31.2	13.0	-	CLIMB	-	-	-	M
33.2	13.0	-	CLIMB	-	-	-	M
34.2	13.0	STRUGGLE	GET	UP	-	-	A
35.2	13.0	-	KNEEL	-	CLIMB	-	X
36.2	13.0	HAVE TO	GO	THROUGH	-	-	A
37.2	13.0	-	CLIMB	SLOWLY	PASS	-	M
38.2	13.0	TRY	CLIMB	-	-	-	M
39.2	13.0	-	SCRAMBLE	UP TO	-	-	M
40.2	13.0	-	FALL	DOWN	-	-	P
41.2	13.0	START	WALK	SLOWLY	-	-	M
42.2	13.0	START	CRAWL	ON	-	-	M
43.2	13.0	START	CLIMB	-	-	-	M
44.2	13.0	START	CLIMB	-	CRAWL	-	M
46.2	13.0	-	CRAWL	OVER	-	-	M
47.2	13.0	-	CLIMB	-	-	-	M
48.2	13.0	-	CRAWL	UP	-	-	M
49.2	13.0	-	FALL	ON	-	-	P
50.2	13.0	-	CLIMB	TO	-	-	M
51.2	13.0	-	CLIMB	-	-	-	M
61.2	13.0	-	GO	OVER	-	-	A
63.2	13.0	-	CLIMB	ON	-	-	M
65.2	13.0	-	CRAWL	OVER	-	-	M
66.2	13.0	-	CLIMB	-	-	-	M
67.2	13.0	-	CRAWL	OVER	-	-	M
68.2	13.0	-	CLIMB	-	-	-	M
69.2	13.0	TRY	CLIMB	OVER	CRAWL	-	M
70.2	13.0	-	CLIMB	OVER	-	-	M
71.2	13.0	START	GO	UP	-	-	A
72.2	13.0	-	CRAWL	UP	-	-	M
73.2	13.0	-	CRAWL	OUT FROM	-	-	M
74.2	13.0	-	CLIMB	-	-	-	M
75.2	13.0	-	ASCEND	OVER	-	-	P
78.2	13.0	-	CLIMB	-	-	-	M
79.2	13.0	-	CLIMB	OVER	-	-	M
81.2	13.0	-	CLIMB	OVER	-	-	M
82.2	13.0	STRUGGLE	CLIMB	ON	-	-	M
83.2	13.0	-	CROSS	-	GO	UP	P
84.2	13.0	-	CLIMB	-	-	-	M
87.2	13.0	HAVE TO	SLIDE	-	FALL	ON	M

(14) He hesitated when he CAME TO a fork in the path...

N A T I V E S P E A K E R S

MT	101	14.came to
	102	14.-
	103	14.came to fork
	104	14.came to fork
	105	14.-
	106	14.-
	107	14.-
	108	14.came to
	109	14.came to path
MT	201	14.came to forked path
	202	14.found a narrow road
	203	14.came to forked path
	204	14.came to fork in road
	205	14.(didn't know which way)
	206	14.-
	207	14.-
	208	14.-
	209	14.came to cut-off in path
	210	14.came to fork in road
	211	14.came to fork in road
	212	14.came to fork in path
	213	14.kept walking along path
	214	14.stopped and hesitated
	215	14.-
	216	14.came to fork
	217	14.saw another two paths
	218	14.came to two paths
	219	14.came to fork in road
	220	14.(hesitated)
	221	14.stopped for a minute
	222	14.comes to
	223	14.hesitated
	224	14.came to

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	14.0	-	STAND	AT	-	-	X
33.1	14.0	-	COME	ACROSS	-	-	P
34.1	14.0	-	FIND	-	-	-	P
37.1	14.0	START	WALK	-	-	-	M
38.1	14.0	-	REACH	-	-	-	P
39.1	14.0	-	COME	TO	-	-	P
40.1	14.0	-	REACH	-	-	-	P
42.1	14.0	-	GET	ON WAY	-	-	A
46.1	14.0	-	REACH	-	-	-	P
48.1	14.0	-	WALK	INTO	SEE	-	M
50.1	14.0	-	FIND	-	-	-	P
51.1	14.0	-	COME	TO	-	-	P
52.1	14.0	-	SEE	-	-	-	X
53.1	14.0	-	COME	TO	-	-	P
54.1	14.0	-	FIND	-	-	-	P
55.1	14.0	-	COME	IN	-	-	P
56.1	14.0	-	COME	TO	-	-	P
57.1	14.0	-	FOLLOW	-	-	-	P
58.1	14.0	-	COME	TO	-	-	P
61.1	14.0	-	COME	ON	-	-	P
63.1	14.0	-	FIND	-	-	-	P
66.1	14.0	-	REACH	-	-	-	P
69.1	14.0	-	WALK	ALONG	-	-	M
70.1	14.0	-	REACH	-	-	-	P
71.1	14.0	-	STAND	-	-	-	X
72.1	14.0	-	REACH	-	-	-	P
73.1	14.0	-	COME	ACROSS	-	-	P
74.1	14.0	-	REACH	-	-	-	P
75.1	14.0	-	COME	BY	-	-	P
76.1	14.0	-	FIND	-	-	-	P
77.1	14.0	-	REACH	-	-	-	P
78.1	14.0	-	COME	TO	-	-	P
79.1	14.0	-	?	-	-	-	?
80.1	14.0	-	REACH	-	-	-	P
82.1	14.0	-	COME	TO	-	-	P
83.1	14.0	-	REACH	-	-	-	P
84.1	14.0	-	REACH	-	-	-	P
86.1	14.0	-	FIND	-	-	-	P

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.2	14.0	-	REACH	-	FIND	-	P
34.2	14.0	-	REACH	-	-	-	P
35.2	14.0	-	REACH	-	-	-	P
36.2	14.0	-	GO	TO	-	-	A
37.2	14.0	START	WALK	-	-	-	M
38.2	14.0	-	COME	INTO	-	-	P
39.2	14.0	-	COME	TO	-	-	P
40.2	14.0	-	COME	INTO	-	-	P
46.2	14.0	-	COME	TO	-	-	P
47.2	14.0	-	REACH?	-	-	-	P
50.2	14.0	-	FIND	-	-	-	P
51.2	14.0	-	COME	TO	-	-	P
52.2	14.0	-	COME	TO	-	-	P
53.2	14.0	-	COME	TO	-	-	P
54.2	14.0	-	FIND	-	-	-	P
55.2	14.0	-	FIND	SELF NEAR	-	-	P
56.2	14.0	-	COME	TO	-	-	P
57.2	14.0	-	COME	TO	-	-	P
58.2	14.0	-	REACH	-	-	-	P
61.2	14.0	-	COME	TO	-	-	P
64.2	14.0	-	TURN?	BACK	-	-	P
65.2	14.0	-	FIND	-	-	-	P
66.2	14.0	-	REACH	-	-	-	P
67.2	14.0	-	REACH	-	-	-	P
68.2	14.0	-	REACH	-	-	-	P
69.2	14.0	-	REACH	-	-	-	P
71.2	14.0	-	STAND	UP	-	-	X
72.2	14.0	-	FIND	-	-	-	P
73.2	14.0	-	COME TO..	STANDSTILL	-	-	?
74.2	14.0	-	FIND	-	-	-	P
75.2	14.0	-	COME	ACROSS	-	-	P
77.2	14.0	-	MEET	-	-	-	P
79.2	14.0	-	REACH	-	-	-	P
80.2	14.0	-	COME	TO	-	-	P
81.2	14.0	-	REACH	-	-	-	P
82.2	14.0	-	COME	TO	-	-	P
84.2	14.0	-	REACH	-	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	14.0	-	GET	-	-	-	A
22.1	14.0	-	GO	-	FIND	-	A
23.1	14.0	-	FIND	-	-	-	P
24.1	14.0	-	REACH	-	-	-	P
26.1	14.0	-	CONTINUE	-	-	-	T
28.1	14.0	-	REACH	-	-	-	P
30.1	14.0	-	SEE	-	-	-	X
31.1	14.0	-	REACH	-	-	-	P
32.1	14.0	-	CONTINUE	-	-	-	T
33.1	14.0	-	FIND	-	-	-	P
35.1	14.0	-	FIND	-	-	-	P
36.1	14.0	-	MEET	-	-	-	X
37.1	14.0	-	SEE	-	-	-	X
38.1	14.0	-	REACH	-	-	-	P
40.1	14.0	-	COME	ACROSS	-	-	P
42.1	14.0	-	MEET	-	-	-	X
43.1	14.0	-	REACH	AT	-	-	P
44.1	14.0	-	REACH	-	-	-	P
45.1	14.0	-	FOLLOW	-	-	-	P
61.1	14.0	-	COME	TO	-	-	P
64.1	14.0	-	REACH	-	-	-	P
65.1	14.0	-	MEET	-	-	-	X
67.1	14.0	-	GO	-	-	-	A
68.1	14.0	-	REACH	-	-	-	P
69.1	14.0	-	COME	ACROSS	-	-	P
73.1	14.0	-	REACH	TO	-	-	P
74.1	14.0	-	COME	ACROSS	-	-	P
75.1	14.0	-	REACH	-	-	-	P
76.1	14.0	-	FIND	-	-	-	P
77.1	14.0	-	MEET	-	-	-	X
78.1	14.0	-	MEET	-	-	-	X
81.1	14.0	-	ARRIVE	AT	-	-	P
82.1	14.0	-	GET	-	-	-	A
83.1	14.0	-	COME	TO	-	-	P
84.1	14.0	-	GET	-	-	-	A
85.1	14.0	-	FIND	-	-	-	P
87.1	14.0	-	FIND	-	-	-	P
88.1	14.0	-	REACH	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	14.0	-	REACH	-	-	-	P
23.2	14.0	-	REACH	-	-	-	P
24.2	14.0	-	REACH	-	-	-	P
25.2	14.0	-	FIND	-	-	-	P
27.2	14.0	-	COME	THROUGH	-	-	P
28.2	14.0	-	FIND	-	-	-	P
29.2	14.0	-	RUN	UP TO	-	-	M
30.2	14.0	-	SEE	-	-	-	X
32.2	14.0	-	CONTINUE	-	GO	-	T
34.2	14.0	-	COME	TO	-	-	P
35.2	14.0	-	FIND	-	-	-	P
38.2	14.0	-	REACH	-	-	-	P
40.2	14.0	-	COME	TO	-	-	P
41.2	14.0	-	GO	THROUGH	-	-	A
42.2	14.0	-	MEET	-	-	-	X
44.2	14.0	-	REACH	-	-	-	P
61.2	14.0	-	COME	TO	-	-	P
62.2	14.0	-	MEET	-	-	-	X
63.2	14.0	-	REACH	-	-	-	P
64.2	14.0	-	REACH	-	-	-	P
65.2	14.0	-	COME	ACROSS	-	-	P
66.2	14.0	-	REACH	-	-	-	P
69.2	14.0	-	COME	ACROSS	-	-	P
72.2	14.0	-	MEET	-	-	-	X
73.2	14.0	-	REACH	TO	-	-	P
76.2	14.0	-	TRAVEL	-	-	-	A
77.2	14.0	-	MEET	-	-	-	X
78.2	14.0	-	MEET	-	-	-	P
79.2	14.0	-	REACH	-	-	-	P
80.2	14.0	-	REACH	-	-	-	P
81.2	14.0	-	COME	TO	-	-	P
82.2	14.0	-	REACH	-	-	-	P
83.2	14.0	-	COME	TO	-	-	P
84.2	14.0	-	COME	ACROSS	-	-	P
86.2	14.0	-	?	-	-	-	?
87.2	14.0	-	FIND	-	-	-	P
88.2	14.0	-	REACH	-	-	-	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	14.0	-	REACH	AT	-	-	P
22.1	14.0	-	FIND	-	-	-	P
23.1	14.0	-	GO	ON TO	-	-	A
24.1	14.0	-	REACH	-	-	-	P
26.1	14.0	-	COME	TO	-	-	P
27.1	14.0	-	REACH	TO	-	-	P
28.1	14.0	-	REACH	-	-	-	P
30.1	14.0	-	REACH	-	-	-	P
31.1	14.0	-	REACH	-	-	-	P
32.1	14.0	-	COME	TO	-	-	P
33.1	14.0	-	REACH	-	-	-	P
34.1	14.0	-	FIND	-	-	-	P
35.1	14.0	-	REACH	TO	-	-	P
36.1	14.0	-	REACH	AT	-	-	P
37.1	14.0	-	COME	TO	-	-	P
39.1	14.0	-	REACH	AT	-	-	P
40.1	14.0	-	REACH	AT	-	-	P
43.1	14.0	-	REACH	-	-	-	P
45.1	14.0	-	REACH	-	-	-	P
48.1	14.0	-	REACH	-	-	-	P
49.1	14.0	-	REACH	-	-	-	P
50.1	14.0	-	REACH	-	-	-	P
51.1	14.0	-	REACH	AT	-	-	P
61.1	14.0	-	REACH	-	-	-	P
62.1	14.0	-	REACH	-	-	-	P
63.1	14.0	-	COME	TO	-	-	P
66.1	14.0	-	REACH	-	-	-	P
67.1	14.0	-	GET	AT	-	-	A
69.1	14.0	-	COME	AT	-	-	P
70.1	14.0	-	REACH	-	-	-	P
71.1	14.0	-	REACH	-	-	-	P
72.1	14.0	-	REACH	-	-	-	P
74.1	14.0	-	REACH	-	-	-	P
82.1	14.0	-	REACH	AT	-	-	P
83.1	14.0	-	REACH	-	-	-	P
84.1	14.0	-	COME	BETWEEN	-	-	P
85.1	14.0	-	REACH	-	-	-	P
86.1	14.0	-	REACH	-	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.2	14.0	-	REACH	-	-	-	P
24.2	14.0	-	REACH	-	-	-	P
26.2	14.0	-	REACH	-	-	-	P
27.2	14.0	-	REACH	-	-	-	P
28.2	14.0	-	REACH	-	-	-	P
30.2	14.0	-	REACH	-	-	-	P
31.2	14.0	-	REACH	-	-	-	P
33.2	14.0	-	REACH	-	-	-	P
34.2	14.0	-	REACH	-	-	-	P
35.2	14.0	-	REACH	-	-	-	P
36.2	14.0	-	WALK	SLOWLY	REACH	-	M
37.2	14.0	-	STOP?	-	SEE	-	T
38.2	14.0	-	GO	-	-	-	A
39.2	14.0	-	REACH	AT	-	-	P
44.2	14.0	-	MEET	-	-	-	X
46.2	14.0	-	COME	-	-	-	P
47.2	14.0	-	REACH	-	-	-	P
48.2	14.0	-	REACH	-	-	-	P
49.2	14.0	-	GO	ON	-	-	A
50.2	14.0	-	REACH	-	-	-	P
51.2	14.0	-	REACH	-	-	-	P
61.2	14.0	-	REACH	-	-	-	P
63.2	14.0	-	COME	TO	-	-	P
65.2	14.0	-	GET	TO	-	-	A
66.2	14.0	-	REACH	-	-	-	P
69.2	14.0	-	COME	BY	-	-	P
70.2	14.0	-	REACH	-	-	-	P
71.2	14.0	-	REACH	AHEAD	FIND	-	P
72.2	14.0	-	REACH	-	-	-	P
73.2	14.0	-	ARRIVE	-	-	-	P
74.2	14.0	-	REACH	ON	-	-	P
75.2	14.0	-	REACH	-	-	-	P
81.2	14.0	-	COME	-	-	-	P
82.2	14.0	-	REACH	-	-	-	P
83.2	14.0	-	MEET	-	-	-	X
84.2	14.0	-	COME	TO	-	-	P

(14) ...but in the end he FOLLOWED the path to the left

N A T I V E S P E A K E R S

MT	101	141.chose to take
	102	141.started to go up
	103	141.went on left
	104	141.ta'en one on left
	105	141.took left
	106	141.walked on left
	107	141.went on first path
	108	141.took first one
	109	141.took left
MT	201	141.decided to take left
	202	141.-
	203	141.went
	204	141.decided to take left
	205	141.kept on walking to left
	206	141.took one
	207	141.came round corner [?]
	208	141.-
	209	141.took his left
	210	141.took path to his left
	211	141.decided to take left
	212	141.decided to take left
	213	141.-
	214	141.took the wrong way
	215	141.-
	216	141.decided to take left
	217	141.took first one
	218	141.chose left
	219	141.decided to go to left
	220	141.followed one on left
	221	141.turned to left
	222	141.taken the left
	223	141.chose left
	224	141.decided to take left

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.1	14.1	-	FOLLOW	-	-	-	P
34.1	14.1	-	TAKE	-	-	-	P
35.1	14.1	-	TAKE	-	-	-	P
36.1	14.1	-	FOLLOW	-	-	-	P
38.1	14.1	START	WALK	-	-	-	M
39.1	14.1	DECIDE	TAKE	-	-	-	P
40.1	14.1	DECIDE	FOLLOW	-	-	-	P
41.1	14.1	-	GO	-	-	-	A
42.1	14.1	DECIDE	FOLLOW	-	-	-	P
46.1	14.1	-	TAKE	-	-	-	P
48.1	14.1	DECIDE	FOLLOW	-	-	-	P
49.1	14.1	-	FOLLOW	-	-	-	P
50.1	14.1	-	FOLLOW	-	-	-	P
51.1	14.1	-	TAKE	-	-	-	P
52.1	14.1	-	TAKE	-	-	-	P
53.1	14.1	DECIDE	FOLLOW	-	-	-	P
54.1	14.1	DECIDE	PASS	THROUGH	-	-	P
55.1	14.1	-	TAKE	-	-	-	P
56.1	14.1	DECIDE	PASS	-	-	-	P
58.1	14.1	DECIDE	FOLLOW	-	-	-	P
61.1	14.1	DECIDE	TAKE	-	-	-	P
62.1	14.1	-	TAKE	-	-	-	P
63.1	14.1	DECIDE	TAKE	-	-	-	P
64.1	14.1	DECIDE	TAKE	-	-	-	P
66.1	14.1	DECIDE	TAKE	-	-	-	P
68.1	14.1	-	WALK	-	-	-	M
70.1	14.1	-	TAKE	-	-	-	P
71.1	14.1	START	WALK	-	TAKE	-	M
72.1	14.1	-	DECIDE	ON	GO	ON	X
73.1	14.1	DECIDE	FOLLOW	-	-	-	P
74.1	14.1	DECIDE	FOLLOW	-	-	-	P
75.1	14.1	DECIDE	TAKE	-	-	-	P
76.1	14.1	DECIDE	TAKE	-	-	-	P
77.1	14.1	DECIDE	TAKE	-	-	-	P
78.1	14.1	DECIDE	TAKE	-	-	-	P
79.1	14.1	-	BRANCH	-	-	-	P
80.1	14.1	-	CHOOSE	-	-	-	X
82.1	14.1	DECIDE	TAKE	-	-	-	P
83.1	14.1	DECIDE	TAKE	-	-	-	P
84.1	14.1	DECIDE	FOLLOW	-	-	-	P
85.1	14.1	DECIDE	TAKE	-	-	-	P
86.1	14.1	DECIDE	FOLLOW	-	-	-	P

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
34.2	14.1	-	CHOOSE	-	-	-	X
35.2	14.1	-	TAKE	-	-	-	P
36.2	14.1	DECIDE	FOLLOW	-	-	-	P
38.2	14.1	-	TAKE	-	-	-	P
39.2	14.1	-	TAKE	-	-	-	P
40.2	14.1	DECIDE	TAKE	-	-	-	P
41.2	14.1	-	FOLLOW	-	-	-	P
42.2	14.1	DECIDE	FOLLOW	-	-	-	P
46.2	14.1	-	TAKE	-	-	-	P
48.2	14.1	DECIDE	TAKE	-	-	-	P
50.2	14.1	-	FOLLOW	-	-	-	P
51.2	14.1	-	TAKE	-	-	-	P
52.2	14.1	-	FOLLOW	-	-	-	P
53.2	14.1	DECIDE	FOLLOW	-	-	-	P
54.2	14.1	DECIDE	PASS	ON	-	-	P
55.2	14.1	-	PASS	-	-	-	P
56.2	14.1	-	GO	TO	-	-	A
58.2	14.1	-	TAKE	-	-	-	P
61.2	14.1	DECIDE	TAKE	-	-	-	P
62.2	14.1	DECIDE	TAKE	-	-	-	P
63.2	14.1	-	TAKE	-	-	-	P
64.2	14.1	DECIDE	TAKE	-	-	-	P
65.2	14.1	DECIDE	FOLLOW	-	-	-	P
66.2	14.1	DECIDE	TAKE	-	-	-	P
67.2	14.1	DECIDE	TURN	BACK	FOLLOW	-	P
68.2	14.1	DECIDE	FOLLOW	-	-	-	P
69.2	14.1	DECIDE	FOLLOW	-	-	-	P
71.2	14.1	-	TAKE	-	-	-	P
72.2	14.1	DECIDE	FOLLOW	-	-	-	P
73.2	14.1	-	FIND	-	GO	ON	P
76.2	14.1	-	TAKE	-	-	-	P
77.2	14.1	DECIDE	TAKE	-	-	-	P
79.2	14.1	DECIDE	FOLLOW	-	-	-	P
80.2	14.1	-	TAKE	-	-	-	P
81.2	14.1	-	GUESS	-	-	-	X
82.2	14.1	DECIDE	TAKE	-	-	-	P
84.2	14.1	DECIDE	FOLLOW	-	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.1	14.1	DECIDE	FOLLOW	-	-	-	P
23.1	14.1	-	FOLLOW	-	-	-	P
24.1	14.1	-	TAKE	-	-	-	X
25.1	14.1	-	PASS	-	-	-	P
28.1	14.1	-	FOLLOW	-	-	-	P
30.1	14.1	DECIDE	PASS	THROUGH	-	-	P
31.1	14.1	-	ENTER	-	-	-	P
33.1	14.1	START	FOLLOW	-	-	-	P
35.1	14.1	DECIDE	PASS	-	-	-	P
37.1	14.1	DECIDE	GO	ON TO	-	-	A
38.1	14.1	-	TAKE	-	-	-	X
40.1	14.1	-	FOLLOW	-	-	-	P
42.1	14.1	-	TAKE	-	-	-	X
43.1	14.1	DECIDE	PASS	-	-	-	P
44.1	14.1	-	GO	WITH	-	-	A
61.1	14.1	-	TAKE	-	-	-	X
62.1	14.1	DECIDE	FOLLOW	-	-	-	P
64.1	14.1	-	FOLLOW	-	-	-	P
65.1	14.1	DECIDE	FOLLOW	-	-	-	P
66.1	14.1	DECIDE	FOLLOW	-	-	-	P
67.1	14.1	TRY	FOLLOW	-	-	-	P
69.1	14.1	DECIDE	FOLLOW	-	-	-	P
73.1	14.1	DECIDE	FOLLOW	-	-	-	P
74.1	14.1	-	TAKE	-	-	-	X
75.1	14.1	-	PASS	-	-	-	P
76.1	14.1	-	FOLLOW	-	-	-	P
77.1	14.1	DECIDE	TAKE	-	-	-	X
78.1	14.1	-	FOLLOW	-	-	-	P
79.1	14.1	-	USE	-	-	-	X
81.1	14.1	DECIDE	TAKE	-	-	-	X
82.1	14.1	DECIDE	FOLLOW	-	-	-	P
83.1	14.1	DECIDE	TURN	-	-	-	P
84.1	14.1	DECIDE	TAKE	-	-	-	X
87.1	14.1	DECIDE	FOLLOW	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.2	14.1	-	FOLLOW	-	-	-	P
23.2	14.1	-	FOLLOW	-	-	-	P
27.2	14.1	-	TAKE	-	-	-	X
28.2	14.1	DECIDE	GO	TO	-	-	A
29.2	14.1	-	TAKE	-	-	-	X
30.2	14.1	DECIDE	PASS	-	-	-	P
33.2	14.1	-	FOLLOW	-	-	-	P
34.2	14.0	DECIDE	TAKE	-	-	-	X
35.2	14.1	-	FOLLOW	-	-	-	P
37.2	14.1	DECIDE	TAKE	-	-	-	X
38.2	14.1	DECIDE	PASS	-	-	-	P
40.2	14.1	-	FOLLOW	-	-	-	P
42.2	14.1	-	TAKE	-	-	-	X
43.2	14.1	-	GO	-	-	-	A
44.2	14.1	-	GO	TO	-	-	A
61.2	14.1	DECIDE	TAKE	-	-	-	X
62.2	14.1	DECIDE	FOLLOW	-	-	-	P
63.2	14.1	DECIDE	FOLLOW	-	-	-	P
64.2	14.1	-	FOLLOW	-	-	-	P
65.2	14.1	DECIDE	MOVE	ALONG	-	-	A
66.2	14.1	DECIDE	FOLLOW	-	-	-	P
68.2	14.1	DECIDE	FOLLOW	-	-	-	P
69.2	14.1	-	FOLLOW	-	-	-	P
71.2	14.1	-	FOLLOW	-	-	-	P
72.2	14.1	-	TAKE	-	-	-	X
73.2	14.1	DECIDE	FOLLOW	-	-	-	P
77.2	14.1	DECIDE	?	-	-	-	?
78.2	14.1	-	?	-	-	-	?
79.2	14.1	MAKEUPMIND	FOLLOW	-	-	-	P
80.2	14.1	DECIDE	TAKE	-	-	-	P
81.2	14.1	DECIDE	TAKE	-	-	-	X
82.2	14.1	-	FOLLOW	-	-	-	P
83.2	14.1	DECIDE	FOLLOW	-	-	-	P
84.2	14.1	DECIDE	FOLLOW	-	-	-	P
85.2	14.1	-	FOLLOW	-	-	-	P
86.2	14.1	-	TAKE	-	-	-	X
87.2	14.1	DECIDE	TAKE	-	-	-	X

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	14.1	-	TAKE	-	-	-	P
23.1	14.1	-	GO	BACK TO	-	-	A
26.1	14.1	START	FOLLOW	-	-	-	P
28.1	14.1	-	FOLLOW	-	-	-	P
30.1	14.1	-	FOLLOW	-	-	-	P
31.1	14.1	-	TAKE	-	-	-	P
32.1	14.1	START	FOLLOW	-	-	-	P
33.1	14.1	DECIDE	FOLLOW	-	-	-	P
34.1	14.1	-	FOLLOW	-	-	-	P
35.1	14.1	-	FOLLOW	-	-	-	P
36.1	14.1	-	FOLLOW	-	-	-	P
37.1	14.1	-	FOLLOW	-	-	-	P
38.1	14.1	-	PASS	-	-	-	P
39.1	14.1	-	FOLLOW	-	-	-	P
41.1	14.1	-	FOLLOW	-	-	-	P
42.1	14.1	-	FOLLOW	-	-	-	P
43.1	14.1	-	TURN	-	-	-	P
45.1	14.1	-	FOLLOW	-	-	-	P
48.1	14.1	-	FOLLOW	-	-	-	P
49.1	14.1	-	GO	-	-	-	A
50.1	14.1	DECIDE	FOLLOW	-	-	-	P
51.1	14.1	-	FOLLOW	-	-	-	P
61.1	14.1	DECIDE	USE	-	-	-	X
62.1	14.1	DECIDE	TAKE	-	-	-	P
63.1	14.1	DECIDE	TAKE	-	-	-	P
64.1	14.1	-	FOLLOW	-	-	-	P
66.1	14.1	DECIDE	TAKE	-	-	-	X
69.1	14.1	DECIDE	TAKE	-	-	-	X
70.1	14.1	-	CHOOSE	-	-	-	X
71.1	14.1	CHOOSE	FOLLOW	-	-	-	P
72.1	14.1	DECIDE	TAKE	-	-	-	P
73.1	14.1	DECIDE	FOLLOW	-	-	-	P
74.1	14.1	DECIDE	TAKE	-	-	-	P
75.1	14.1	-	TAKE	-	-	-	X
82.1	14.1	DECIDE	FOLLOW	-	-	-	P
83.1	14.1	-	TAKE	-	-	-	P
84.1	14.1	-	TAKE	-	-	-	P
85.1	14.1	DECIDE	TAKE	-	-	-	P
86.1	14.1	DECIDE	TAKE	-	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	14.1	-	TAKE	-	-	-	P
24.2	14.1	-	FOLLOW	-	-	-	P
26.2	14.1	-	FOLLOW	-	-	-	P
27.2	14.1	-	GO	TO	-	-	A
28.2	14.1	-	FOLLOW	-	-	-	P
29.2	14.1	-	TAKE	-	-	-	P
30.2	14.1	-	TAKE	-	-	-	P
31.2	14.1	-	TAKE	-	-	-	P
33.2	14.1	-	FOLLOW	-	-	-	P
34.2	14.1	-	TAKE	-	-	-	P
36.2	14.1	-	FOLLOW	-	-	-	P
37.2	14.1	-	RUN	-	-	-	M
38.2	14.1	-	PASS	-	-	-	P
39.2	14.1	-	FOLLOW	-	-	-	P
41.2	14.1	-	LEAVE	-	-	-	P
42.2	14.1	-	FOLLOW	-	-	-	P
43.2	14.1	-	TURN	-	-	-	P
44.2	14.1	DECIDE	CHOOSE	-	-	-	X
45.2	14.1	DECIDE	FOLLOW	-	-	-	P
46.2	14.1	DECIDE	FOLLOW	-	-	-	P
48.2	14.1	-	FOLLOW	-	-	-	P
50.2	14.1	SUSPECT	TAKE	-	-	-	X
51.2	14.1	-	FOLLOW	-	-	-	P
61.2	14.1	-	FOLLOW	-	-	-	P
63.2	14.1	DECIDE	FOLLOW	-	-	-	P
66.2	14.1	-	TAKE	-	-	-	P
68.2	14.1	-	TAKE	-	-	-	P
69.2	14.1	-	TAKE	-	-	-	P
70.2	14.1	-	TAKE	-	-	-	P
71.2	14.1	HAVE TO	FOLLOW	-	-	-	P
72.2	14.1	-	TAKE	WAY TO	-	-	P
73.2	14.1	-	FOLLOW	-	-	-	P
74.2	14.1	DECIDE	TAKE	-	-	-	P
75.2	14.1	-	COME	-	-	-	P
81.2	14.1	-	TAKE	-	-	-	X
82.2	14.1	START	WALK	ALONG	-	-	M
83.2	14.1	-	TAKE	-	-	-	P
84.2	14.1	-	TURN	TO	-	-	P
87.2	14.1	DECIDE	FOLLOW	-	-	-	P

(15) However...he RAN BACK to take the other path

N A T I V E S P E A K E R S

MT	101	15.ran back to take
	102	15.started to run other way
	103	15.-
	104	15.ran back
	105	15.(realised had taken wrongway)
	106	15.decided to go to other side
	107	15.ran back
	108	15.went back
	109	15.ran..back
MT	201	15.went back
	202	15.-
	203	15.ran back
	204	15.went back
	205	15.-
	206	15.ran back
	207	15.-
	208	15.-
	209	15.hurried back
	210	15.ran back
	211	15.-
	212	15.hurried back to take
	213	15.-
	214	15.[?kept] going back
	215	15.-
	216	15.came running back
	217	15.ran back
	218	15.ran back
	219	15.rushed back and went
	220	15.ran back
	221	15.-
	222	15.went back
	223	15.ran back...took other path
	224	15.ran back...went to right

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	15.0	-	RUN	-	-	-	M
33.1	15.0	-	RETURN	BACK	-	-	P
34.1	15.0	-	START	-	GO	BACKWARDS	T
35.1	15.0	-	COME	BACK	RUN	-	P
37.1	15.0	START	RUN	AGAIN	-	-	M
38.1	15.0	-	TURN	BACK	-	-	P
40.1	15.0	-	COME	-	TAKE	-	P
42.1	15.0	-	COME	BACK AGAIN	-	-	P
46.1	15.0	-	GO	BACK	-	-	A
47.1	15.0	DECIDE	GO	BACK AGAIN	-	-	A
48.1	15.0	-	GO	BACK	-	-	A
49.1	15.0	-	TURN	BACK	-	-	P
51.1	15.0	-	GO	BACK	FOLLOW	-	A
52.1	15.0	-	TURN	BACK	-	-	P
53.1	15.0	-	RUN	-	-	-	M
54.1	15.0	-	GO	AGAIN ON	-	-	A
55.1	15.0	-	GO	BEHIND	-	-	A
56.1	15.0	-	GO	BACK	-	-	A
57.1	15.0	-	TURN	BACK	GO	BACK	P
58.1	15.0	-	COME	BACK	-	-	P
61.1	15.0	DECIDE	GO	BACK	RUN	-	A
62.1	15.0	DECIDE	GO	BACK	-	-	A
66.1	15.0	-	COME	BACK	-	-	P
68.1	15.0	HAVE TO	GO	DOWN	-	-	A
69.1	15.0	DECIDE	DIVERGE	-	FOLLOW	-	P
70.1	15.0	-	COME	BACK AGAIN	-	-	P
71.1	15.0	START	RUN	BACK	-	-	M
75.1	15.0	DECIDE	CHANGE	-	-	-	X
76.1	15.0	-	RUN	-	-	-	M
77.1	15.0	-	COME	BACK	RUN	-	P
78.1	15.0	-	COME	BACK	-	-	P
80.1	15.0	-	GO	BACK	-	-	A
81.1	15.0	DECIDE	RUN	-	-	-	M
82.1	15.0	START	COME	BACK	-	-	P
86.1	15.0	DECIDE	GO	BACK	-	-	A

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	15.0	-	FOLLOW	-	-	-	P
33.2	15.0	-	RETURN	BACK	-	-	P
35.2	15.0	-	COME	BACK	RUN	-	P
36.2	15.0	DECIDE	GO	BACK	-	-	A
38.2	15.0	-	COME	BACK	-	-	P
39.2	15.0	-	COME	BACK	RUN	-	P
40.2	15.0	-	COME	BACK	-	-	P
42.2	15.0	-	COME	TO	-	-	P
46.2	15.0	-	COME	BACK	-	-	P
47.2	15.0	DECIDE	TURN	BACK	-	-	P
48.2	15.0	-	LEAVE	-	FOLLOW	-	P
49.2	15.0	-	COME	BACK	-	-	P
50.2	15.0	-	GO	BACK	-	-	A
51.2	15.0	-	TURN	-	TAKE	-	P
52.2	15.0	-	COME	BACK	-	-	P
53.2	15.0	-	GO	BACK	-	-	A
54.2	15.0	DECIDE	COME	BACK	-	-	P
55.2	15.0	-	GO	BACK	-	-	A
57.2	15.0	DECIDE	TURN	BACK	-	-	P
58.2	15.0	-	GO	BACK	-	-	A
61.2	15.0	DECIDE	COME	BACK	RUN	-	P
62.2	15.0	DECIDE	COME	BACK	-	-	P
63.2	15.0	-	COME	BACK	TAKE	-	P
65.2	15.0	-	COME	BACK	-	-	P
66.2	15.0	-	COME	BACK	-	-	P
67.2	15.0	-	COME	-	RUN	.BACKWARDS	P
68.2	15.0	HAVE TO	COME	BACK	-	-	P
69.2	15.0	DECIDE	RETURN	-	-	-	P
71.2	15.0	-	RUN	BACK	TAKE	-	M
72.2	15.0	-	COME	BACK	RUN	-	P
75.2	15.0	-	TURN	BACK	-	-	P
76.2	15.0	DECIDE	RUN	BACK	-	-	M
77.2	15.0	DECIDE	COME	BACK	RUN	-	P
78.2	15.0	-	COME	BACK	-	-	P
79.2	15.0	-	GO	BACK	-	-	A
80.2	15.0	-	COME	BACK	-	-	P
81.2	15.0	DECIDE	COME	BACK	RUN	-	P
82.2	15.0	-	GO	-	-	-	A
84.2	15.0	DECIDE	WALK	BACK	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	15.0	-	RUN	-	-	-	M
22.1	15.0	-	TURN	BACK	-	-	P
23.1	15.0	-	COME	BACK	RUN	-	P
24.1	15.0	-	COME	BACK AGAIN	-	-	P
26.1	15.0	-	RUN	BACK	-	-	M
28.1	15.0	-	COME	BACK	-	-	P
29.1	15.0	-	RUN	-	-	-	M
32.1	15.0	-	COME	BACK	-	-	P
33.1	15.0	DECIDE	COME	BACK	-	-	P
34.1	15.0	START	RUN	-	-	-	M
35.1	15.0	DECIDE	GO	-	-	-	A
36.1	15.0	-	TURN	BACK	-	-	P
37.1	15.0	-	COME	BACK	-	-	P
39.1	15.0	-	RUN	BACK AGAIN	-	-	M
40.1	15.0	-	RUN	FAST	-	-	M
41.1	15.0	START	GO	BACK	-	-	A
42.1	15.0	-	GO	BACK	-	-	A
43.1	15.0	-	COME	BACK	-	-	P
45.1	15.0	-	TURN	-	FOLLOW	-	P
46.1	15.0	DECIDE	GO	BACK	-	-	A
61.1	15.0	-	COME	BACK	-	-	P
64.1	15.0	-	GO	BACK	RUN	-	A
65.1	15.0	-	COME	BACK	RUN	-	P
66.1	15.0	DECIDE	GO	BACK	-	-	A
67.1	15.0	-	RUN	BACK	-	-	M
68.1	15.0	-	COME	BACK	-	-	P
69.1	15.0	-	CONTINUE	-	-	-	T
74.1	15.0	-	COME	BACK	-	-	P
75.1	15.0	-	GO	BACK	-	-	A
77.1	15.0	-	COME	BACK	-	-	P
78.1	15.0	-	GO	BACK	RUN	-	A
81.1	15.0	-	TURN	-	-	-	P
82.1	15.0	-	RUN	BACK	-	-	M
83.1	15.0	-	COME	BACK	-	-	P
84.1	15.0	-	GO	BACK	-	-	A
85.1	15.0	-	TURN	BACK	-	-	P
86.1	15.0	-	COME	BACK	-	-	P
87.1	15.0	DECIDE	RUN	BACK	-	-	M
88.1	15.0	-	COME	BACK	RUN	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	15.0	-	GO	BACK	RUN	-	A
22.2	15.0	-	TURN	BACK	-	-	P
23.2	15.0	-	RETURN	BACK	-	-	P
24.2	15.0	DECIDE	COME	BACK	-	-	P
25.2	15.0	-	RUN	UP TO	-	-	M
27.2	15.0	-	RETURN	BACK	-	-	P
28.2	15.0	-	COME	BACK	-	-	P
31.2	15.0	-	TURN	BACK	-	-	P
32.2	15.0	-	COME	BACK	-	-	P
33.2	15.0	-	COME	BACK	RUN	-	P
34.2	15.0	-	RETURN	BACK	-	-	P
35.2	15.0	-	GO	BACK	-	-	A
37.2	15.0	-	COME	BACK	RUN	-	P
38.2	15.0	-	RETURN	-	-	-	P
40.2	15.0	-	COME	BACK	-	-	P
41.2	15.0	START	COME	BACK	-	-	P
42.2	15.0	-	RETURN	BACK	-	-	P
43.2	15.0	-	COME	-	PASS	IN	P
44.2	15.0	-	COME	BACK	-	-	P
45.2	15.0	-	COME	BACK	-	-	P
46.2	15.0	-	COME	BACK	-	-	P
61.2	15.0	-	COME	BACK	-	-	P
63.2	15.0	-	RUN	BACK	FOLLOW	-	M
64.2	15.0	-	RUN	BACK	-	-	M
65.2	15.0	-	WALK	-	-	-	M
66.2	15.0	DECIDE	GO	BACK	-	-	A
68.2	15.0	-	RUN	BACK	-	-	M
69.2	15.0	-	GO	BACK	-	-	A
72.2	15.0	-	COME	BACK	-	-	P
73.2	15.0	-	RUN	BACK	-	-	M
76.2	15.0	-	TURN	BACK	-	-	P
77.2	15.0	-	TURN	BACK	-	-	P
78.2	15.0	-	COME	BACK	-	-	P
80.2	15.0	-	RUN	BACK TO	-	-	M
81.2	15.0	-	TURN	BACK	-	-	P
82.2	15.0	-	GO	BACK	-	-	A
83.2	15.0	-	GO	BACK	-	-	A
84.2	15.0	TRY	GO	BACK	-	-	A
85.2	15.0	-	COME	TO	-	-	P
86.2	15.0	-	COME	-	-	-	P
87.2	15.0	-	RETURN	-	TAKE	-	P
88.2	15.0	HAVE TO	GO	BACK	-	-	A

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
23.1	15.0	-	COME	TO	-	-	P
25.1	15.0	-	GO	BACK	-	-	A
26.1	15.0	START	FOLLOW	-	-	-	P
30.1	15.0	-	GO	BACK	-	-	A
31.1	15.0	-	TURN	BACK	-	-	P
33.1	15.0	-	GO	BACK	-	-	A
34.1	15.0	-	COME	BACK	-	-	P
35.1	15.0	START	RUN	-	-	-	M
36.1	15.0	HAVE TO	GO	BACK	-	-	A
37.1	15.0	-	COME	BACK	-	-	P
38.1	15.0	-	PASS	-	-	-	P
39.1	15.0	-	TURN	-	-	-	P
41.1	15.0	-	GO	BACK AGAIN	-	-	A
42.1	15.0	DECIDE	COME	BACK	-	-	P
46.1	15.0	START	RUN	-	GO	BACK	M
51.1	15.0	HAVE TO	RETURN	BACK	-	-	P
61.1	15.0	-	COME	BACK	-	-	P
62.1	15.0	HAVE TO	GO	-	TAKE	-	A
63.1	15.0	-	GO	BACK	-	-	A
64.1	15.0	-	RETURN	BACK	-	-	P
65.1	15.0	DECIDE	COME	BACK	-	-	P
67.1	15.0	-	GET	-	-	-	A
68.1	15.0	-	GO	ON	-	-	A
69.1	15.0	HAVE TO	GO	BACK	-	-	A
71.1	15.0	-	RETURN	BACK	-	-	P
72.1	15.0	-	COME	BACK	-	-	P
73.1	15.0	DECIDE	FOLLOW	-	-	-	P
74.1	15.0	HAVE TO	COME	BACK	-	-	P
75.1	15.0	-	GO	ON	-	-	A
81.1	15.0	TRY	GO	BACK	-	-	A
82.1	15.0	-	REACH	-	-	-	P
83.1	15.0	DECIDE	GO	BACK	-	-	A
84.1	15.0	-	GO	BACK	-	-	A
85.1	15.0	HAVE TO	COME	BACK	-	-	P
86.1	15.0	-	RETURN	BACK	-	-	P

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	15.0	-	GO	BACK	-	-	A
22.2	15.0	-	RUN	-	TAKE	-	M
24.2	15.0	-	COME	BACK	-	-	P
25.2	15.0	-	GO	BACK	-	-	A
29.2	15.0	-	COME	-	RUN	-	P
30.2	15.0	-	TURN	BACK	-	-	P
31.2	15.0	-	TURN	BACK	-	-	P
33.2	15.0	-	COME	BACK	-	-	P
34.2	15.0	-	COME	BACK	-	-	P
35.2	15.0	-	RETURN	-	-	-	P
36.2	15.0	HAVE TO	COME	BACK	-	-	P
37.2	15.0	-	RUN	BACK AGAIN	-	-	M
38.2	15.0	-	GO	BACK	-	-	A
39.2	15.0	-	TURN	BACK	-	-	P
40.2	15.0	START	GO	BACKWARDS	-	-	A
41.2	15.0	-	GO	BACK	-	-	A
42.2	15.0	-	COME	BACK	-	-	P
43.2	15.0	START	RUN	-	-	-	M
44.2	15.0	-	RETURN	-	-	-	P
45.2	15.0	-	COME	-	-	-	P
46.2	15.0	-	COME	BACK	-	-	P
47.2	15.0	-	RETURN	BACK	-	-	P
48.2	15.0	-	FOLLOW	-	-	-	P
50.2	15.0	-	COME	BACK	-	-	P
51.2	15.0	-	TURN	BACK	RUN	-	P
61.2	15.0	-	RETURN	BACK	-	-	P
63.2	15.0	-	RUN	BACK	-	-	M
65.2	15.0	DECIDE	COME	BACK	-	-	P
66.2	15.0	-	COME	BACK	-	-	P
67.2	15.0	-	GET	-	-	-	A
68.2	15.0	-	COME	BACK	-	-	P
69.2	15.0	-	COME	BACK	RUN	-	P
70.2	15.0	-	RETURN	-	TAKE	-	P
72.2	15.0	-	COME	BACK	-	-	P
73.2	15.0	DECIDE	GO	BACK	FOLLOW	-	A
74.2	15.0	-	GET	-	-	-	A
75.2	15.0	START	WALK	-	-	-	M
78.2	15.0	START	RUN	-	-	-	M
79.2	15.0	START	RUN	-	-	-	M
81.2	15.0	-	COME	BACK	-	-	P
83.2	15.0	-	GO	BACK	-	-	A
84.2	15.0	-	TURN	TO	-	-	P
87.2	15.0	DECIDE	GO	BACK	TAKE	-	A

(16) ...he TRUDGED THROUGH a lot of mud

N A T I V E S P E A K E R S

MT 101 16.-
102 16.walked up muddy bank
103 16.went off into mud track
104 16.running in mud
105 16.(tired)
106 16.came to some mud
107 16.walking
108 16.came to muddy road
109 16.walked on

MT 201 16.-
202 16.kept on walking
203 16.walked along
204 16.walked through mud
205 16.got to mud...walking and
206 16.-
207 16.walking in mud
208 16.walking in the mud
209 16.went along path
210 16.getting into mud
211 16.trudging through lots of mud
212 16.trudging on in mud
213 16.-
214 16.walked on
215 16.(tired) walking thro' mud
216 16.walking thro' some thick mud
217 16.(feet in mud)
218 16.walking through mud
219 16.walked along the road
220 16.-
221 16.walking across mud
222 16.walking slowly
223 16.-
224 16.(feet stuck in mud)

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	16.0	-	WALK	-	-	-	M
33.1	16.0	-	CONTINUE	-	-	-	T
35.1	16.0	-	WALK	-	-	-	M
36.1	16.0	-	WALK	-	-	-	M
37.1	16.0	START	WALK	AGAIN	-	-	M
38.1	16.0	-	WALK	-	-	-	M
40.1	16.0	-	GO	-	-	-	A
42.1	16.0	-	WALK	-	-	-	M
50.1	16.0	-	FOLLOW	-	-	-	P
54.1	16.0	-	WALK	-	-	-	M
55.1	16.0	START	WALK	SLOWLY	-	-	M
56.1	16.0	-	GO	-	-	-	A
57.1	16.0	-	COME	TO	-	-	P
58.1	16.0	START	RUN	-	-	-	M
61.1	16.0	-	COME	TO	-	-	P
66.1	16.0	-	FIND	-	-	-	P
68.1	16.0	-	FOLLOW	-	-	-	P
69.1	16.0	-	WALK	OVER	-	-	M
70.1	16.0	-	CONTINUE	-	-	-	T
71.1	16.0	-	FOLLOW	-	-	-	P
73.1	16.0	-	WALK	-	-	-	M
74.1	16.0	-	GO	-	-	-	A
76.1	16.0	TRY	HOP	-	-	-	M
77.1	16.0	-	REACH	-	-	-	P
78.1	16.0	-	CONTINUE	-	-	-	T
79.1	16.0	-	GO	-	-	-	A
80.1	16.0	-	WALK	-	-	-	M
82.1	16.0	-	COME	TO	-	-	P
83.1	16.0	-	WALK	-	-	-	M
84.1	16.0	-	REACH	-	-	-	P
85.1	16.0	-	WALK	-	STUMBLE	-	M
86.1	16.0	-	FIND	-	WALK	-	P

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	16.0	-	PASS	-	-	-	P
33.2	16.0	-	FOLLOW	-	-	-	P
35.2	16.0	-	WALK	-	-	-	M
37.2	16.0	-	REACH	ON	-	-	P
38.2	16.0	-	WALK	ON	-	-	M
39.2	16.0	-	WALK	-	-	-	M
41.2	16.0	-	ENTER	INTO	-	-	P
42.2	16.0	-	FIND	-	-	-	P
46.2	16.0	-	STAGGER	-	-	-	M
48.2	16.0	-	STEP	ON	-	-	M
49.2	16.0	-	FOLLOW	-	-	-	P
50.2	16.0	-	PASS	THROUGH	-	-	P
51.2	16.0	-	WALK	-	-	-	M
52.2	16.0	-	COME	TO	-	-	P
53.2	16.0	-	COME	NEAR	-	-	P
54.2	16.0	-	FOLLOW	-	-	-	P
58.2	16.0	-	WALK	ON MUD	-	-	M
61.2	16.0	-	COME	ACROSS	-	-	P
62.2	16.0	-	SCRAPE	ALONG	-	-	M
63.2	16.0	-	WALK	-	-	-	M
64.2	16.0	-	ADVANCE	-	-	-	P
65.2	16.0	-	WALK	AHEAD	-	-	M
66.2	16.0	-	WALK	A BIT	-	-	M
67.2	16.0	-	TAKE	-	-	-	P
69.2	16.0	-	REACH	-	STRUGGLE	-	P
72.2	16.0	-	WALK	-	-	-	M
74.2	16.0	-	CONTINUE	-	-	-	T
76.2	16.0	-	WALK	-	-	-	M
78.2	16.0	-	CONTINUE	-	-	-	T
79.2	16.0	-	REACH	-	-	-	P
82.2	16.0	-	COME	TO	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.1	16.0	-	GO	-	FIND	-	A
23.1	16.0	-	FIND	-	-	-	P
24.1	16.0	-	STEP	ON	-	-	M
26.1	16.0	-	REACH	-	-	-	P
28.1	16.0	-	GO	-	-	-	A
30.1	16.0	-	GO	-	-	-	A
31.1	16.0	TRY	PASS	-	-	-	P
32.1	16.0	-	CONTINUE	-	-	-	T
33.1	16.0	-	FIND	-	-	-	P
35.1	16.0	-	WALK	-	-	-	M
.....							
38.1	16.0	WANT	CROSS	-	-	-	P
39.1	16.0	-	WALK	SLOWLY	LIMP	-	M
41.1	16.0	-	RUN	-	PASS	-	M
42.1	16.0	-	WALK	-	-	-	M
44.1	16.0	TRY	GO	-	-	-	A
45.1	16.0	-	GO	ON	-	-	A
61.1	16.0	-	GO	THROUGH	-	-	A
62.1	16.0	-	CROSS	-	-	-	P
64.1	16.0	-	CONTINUE	-	-	-	T
65.1	16.0	-	PASS	THROUGH	-	-	P
66.1	16.0	CONTINUE	FOLLOW	-	-	-	P
67.1	16.0	TRY	WALK	-	-	-	M
68.1	16.0	-	WALK	THROUGH	-	-	M
69.1	16.0	-	GO	UP TO	-	-	A
71.1	16.0	DECIDE	MOVE	-	-	-	A
73.1	16.0	-	GO	-	-	-	A
76.1	16.0	-	GO	-	-	-	A
77.1	16.0	-	MEET	-	-	-	X
78.1	16.0	-	PASS	THROUGH	-	-	P
81.1	16.0	-	ARRIVE	AT	-	-	P
82.1	16.0	STRUGGLE	GET	OUT	-	-	A
83.1	16.0	-	GO	THROUGH	-	-	A
85.1	16.0	-	GO	THROUGH	-	-	A
86.1	16.0	-	GO	AHEAD	-	-	A

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.2	16.0	-	GO	THROUGH	-	-	A
23.2	16.0	-	PASS	THROUGH	-	-	P
24.2	16.0	-	STEP	ON	-	-	M
25.2	16.0	-	FIND	-	PASS	-	P
27.2	16.0	-	RUN	-	-	-	M
28.2	16.0	-	GO	ON	-	-	A
30.2	16.0	-	GO	-	-	-	A
31.2	16.0	-	PASS	THROUGH	-	-	P
32.2	16.0	-	CONTINUE	-	-	-	T
33.2	16.0	-	GO	-	-	-	A
34.2	16.0	-	COME	TO	-	-	P
35.2	16.0	-	RUN	-	-	-	M
.....							
37.2	16.0	-	WALK	-	-	-	M
38.2	16.0	TRY	WALK	-	-	-	M
39.2	16.0	-	WALK	SLOWLY	LIMP	-	M
42.2	16.0	-	GO	-	-	-	A
43.2	16.0	-	REACH	-	-	-	P
44.2	16.0	-	REACH	-	-	-	P
45.2	16.0	-	PASS	-	-	-	P
61.2	16.0	-	GO	THROUGH	-	-	A
62.2	16.0	-	PASS	THROUGH	-	-	P
63.2	16.0	-	GO	-	CROSS	-	A
64.2	16.0	-	CONTINUE	-	-	-	T
65.2	16.0	-	COME	ON TO	WALK	-	P
69.2	16.0	-	PASS	THROUGH	-	-	P
71.2	16.0	-	REACH	-	-	-	P
77.2	16.0	-	WALK	SLOWLY	MEET	-	M
78.2	16.0	-	?	-	-	-	?
80.2	16.0	TRY	CLIMB	OVER	-	-	M
82.2	16.0	-	STAGGER	-	-	-	M
83.2	16.0	-	WALK	-	-	-	M
85.2	16.0	-	RUN	THROUGH	-	-	P
86.2	16.0	-	?	-	-	-	?
87.2	16.0	-	GO	-	HAVE TO GO	OVER	A
88.2	16.0	-	REACH	-	-	-	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	16.0	-	WALK	THROUGH	-	-	M
24.1	16.0	START	WALK	SLOWLY	-	-	M
25.1	16.0	START	WALK	-	-	-	M
26.1	16.0	-	WALK	-	-	-	M
27.1	16.0	-	RUN	-	-	-	M
28.1	16.0	-	PASS	-	-	-	P
30.1	16.0	CONTINUE	WALK	-	-	-	M
31.1	16.0	-	FOLLOW	-	-	-	P
33.1	16.0	-	REACH	AT	-	-	P
34.1	16.0	-	COME	TO	-	-	P
35.1	16.0	-	REACH	-	-	-	P
41.1	16.0	-	FOLLOW	-	-	-	P
42.1	16.0	-	STEP	ON	-	-	M
45.1	16.0	-	REACH	-	WALK	-	P
46.1	16.0	-	GO	-	-	-	A
50.1	16.0	-	REACH	-	-	-	P
61.1	16.0	-	COME	OVER	-	-	P
62.1	16.0	-	WALK	THROUGH	-	-	M
64.1	16.0	-	FOLLOW	-	-	-	P
65.1	16.0	-	GO	ON	WALK	-	A
66.1	16.0	-	REACH	-	-	-	P
69.1	16.0	-	GO	THROUGH	-	-	A
70.1	16.0	-	WALK	-	-	-	M
71.1	16.0	-	PASS	THROUGH	DRAG	-	P
72.1	16.0	-	GO	-	-	-	A
74.1	16.0	-	CONTINUE	-	-	-	T
83.1	16.0	-	GO	-	FIND	-	A
85.1	16.0	-	WALK	ALONG	-	-	M
86.1	16.0	TRY	RUN	FASTER	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	16.0	TRY	GO	THROUGH	-	-	A
25.2	16.0	START	WALK	-	-	-	M
26.2	16.0	-	WALK	-	-	-	M
27.2	16.0	-	WALK	-	-	-	M
28.2	16.0	-	REACH	-	-	-	P
29.2	16.0	-	GO	ON	WALK	-	A
30.2	16.0	-	WALK	ALONG	-	-	M
33.2	16.0	-	REACH	-	-	-	P
34.2	16.0	-	FOLLOW	-	-	-	P
35.2	16.0	-	FIND	-	-	-	P
36.2	16.0	-	WALK	SLOWLY	-	-	M
37.2	16.0	-	RUN	-	-	-	M
41.2	16.0	-	FOLLOW	-	-	-	P
42.2	16.0	-	REACH	-	FOLLOW	-	P
44.2	16.0	-	WALK	-	-	-	M
46.2	16.0	-	GO	-	-	-	A
47.2	16.0	-	WALK	-	-	-	M
50.2	16.0	-	REACH	-	-	-	P
51.2	16.0	-	REACH	AT	-	-	P
61.2	16.0	-	MOVE	ON	-	-	A
63.2	16.0	-	TRAVEL	IN	-	-	A
65.2	16.0	-	WADE	-	STRUGGLE	INTO	M
69.2	16.0	-	WADE	THROUGH	-	-	M
72.2	16.0	-	WALK	IN	-	-	M
73.2	16.0	-	TREK	ON	-	-	M
74.2	16.0	-	START?	-	-	-	T
75.2	16.0	-	WALK?	SLOW	-	-	M
78.2	16.0	STRUGGLE	GO	THROUGH	-	-	A
79.2	16.0	-	REACH	-	STOP RUN	-	P
81.2	16.0	-	WALK	-	-	-	M
82.2	16.0	-	REACH	-	-	-	P
83.2	16.0	CONTINUE	FOLLOW	-	GO	-	P
84.2	16.0	-	FOLLOW	-	-	-	P

(17) Unfortunately he SLIPPED OFF the raised path...

N A T I V E S P E A K E R S

MT	101	17.slipped
	102	17.?slithering
	103	17.-
	104	17.-
	105	17.slipped
	106	17.slipped
	107	17.slipped
	108	17.slipped down
	109	17.slipped
MT	201	17.tripped
	202	17.-
	203	17.-
	204	17.-
	205	17.slipped
	206	17.-
	207	17.tripped on some stones
	208	17.slipped
	209	17.-
	210	17.slipped
	211	17.slipped
	212	17.slipped
	213	17.-
	214	17.-
	215	17.slipped
	216	17.slipped
	217	17.collapsed
	218	17.-
	219	17.-
	220	17.-
	221	17.slipped
	222	17.managed to slip off
	223	17.-
	224	17.tripped on rock

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
34.1	17.0	-	FIND	-	-	-	P
35.1	17.0	-	SLIP	-	-	-	M
38.1	17.0	-	STUMBLE	-	-	-	M
39.1	17.0	-	SLIDE	-	-	-	M
42.1	17.0	-	SLIDE	-	-	-	M
50.1	17.0	-	SLIP	-	-	-	M
52.1	17.0	-	STUMBLE	-	-	-	M
53.1	17.0	-	SLIP	UP	-	-	M
57.1	17.0	-	FALL	-	-	-	P
58.1	17.0	-	SLIDE	DOWN	-	-	M
61.1	17.0	-	SLIP	-	-	-	M
63.1	17.0	DECIDE	JUMP	OVER	-	-	M
66.1	17.0	-	FALL	DOWN	STUMBLE	-	P
67.1	17.0	-	SLIP	-	-	-	M
69.1	17.0	GET	SLIP	-	-	-	M
71.1	17.0	-	SLIDE	-	-	-	M
73.1	17.0	-	SLIP?	-	-	-	M
74.1	17.0	-	SLIP	-	-	-	M
76.1	17.0	-	SKID	-	-	-	M
77.1	17.0	-	SLIDE	-	-	-	M
78.1	17.0	TRY	CLIMB	OVER	-	-	M
79.1	17.0	-	SLIP	-	-	-	M
82.1	17.0	-	SLIDE	-	-	-	M
84.1	17.0	TRY	JUMP	OVER	-	-	M
85.1	17.0	-	SLIP	-	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
34.2	17.0	-	REACH	-	-	-	P
37.2	17.0	-	SLIDE	DOWN	-	-	M
39.2	17.0	-	SLIDE	-	-	-	M
40.2	17.0	-	SLIP	-	-	-	M
42.2	17.0	-	SLIP	-	-	-	M
47.2	17.0	-	SLIP	-	-	-	M
50.2	17.0	-	SLIP	-	-	-	M
52.2	17.0	-	STUMBLE	-	-	-	M
53.2	17.0	-	SLIDE	-	-	-	M
54.2	17.0	-	SLIDE	-	-	-	M
57.2	17.0	-	SLIP	-	-	-	M
58.2	17.0	-	SLIDE	-	-	-	M
67.2	17.0	-	SLIP	OVER	-	-	M
71.2	17.0	-	FALL	-	-	-	P
74.2	17.0	-	SLIP	-	-	-	M
76.2	17.0	-	SLIDE	-	-	-	M
77.2	17.0	-	SLIP	FROM	-	-	M
78.2	17.0	-	GO	OVER	-	-	A
79.2	17.0	-	SLIP	DOWN	CLIMB	-	M
80.2	17.0	-	SLIP	OVER	-	-	M
81.2	17.0	-	SLIDE	-	-	-	M
82.2	17.0	-	SLIP	-	-	-	M
84.2	17.0	DECIDE	JUMP	-	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.1	17.0	-	STEP	-	CLIMB	-	M
24.1	17.0	-	SLIDE	-	-	-	M
25.1	17.0	-	RUN	-	-	-	M
26.1	17.0	-	SKID	-	-	-	M
29.1	17.0	-	GO	-	-	-	A
32.1	17.0	-	FIND	-	-	-	P
33.1	17.0	-	SLIP	-	-	-	M
37.1	17.0	DECIDE	JUMP	-	-	-	M
39.1	17.0	-	CLIMB	INTO	-	-	M
40.1	17.0	-	SLIDE	-	-	-	M
41.1	17.0	START	CLIMB	-	-	-	M
42.1	17.0	-	COLLIDE	WITH	-	-	M
44.1	17.0	-	SLIP	-	-	-	M
64.1	17.0	-	JUMP	OVER	SLIP	-	M
65.1	17.0	-	SLIP	-	-	-	M
71.1	17.0	-	SLIDE	-	-	-	M
73.1	17.0	-	SLIP	DOWN	-	-	M
74.1	17.0	-	SLIP	-	-	-	M
77.1	17.0	-	SLIP	DOWN	-	-	M
78.1	17.0	-	SLIP	DOWN	-	-	M
79.1	17.0	-	SLIDE	-	-	-	M
82.1	17.0	-	SLIP	-	-	-	M
83.1	17.0	-	STUMBLE	DOWN	-	-	M
85.1	17.0	-	SLIDE	-	-	-	M
86.1	17.0	-	SLIP	-	-	-	M
87.1	17.0	-	SLIDE	-	-	-	M

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
24.2	17.0	-	SLIDE	-	-	-	M
27.2	17.0	-	SLIDE	-	-	-	M
28.2	17.0	-	FALL	ON	-	-	P
32.2	17.0	-	CRAWL	OVER	-	-	M
33.2	17.0	-	SLIDE	-	-	-	M
37.2	17.0	-	SLIP	-	-	-	M
40.2	17.0	-	COME	ACROSS	-	-	P
42.2	17.0	-	FALL	TO	-	-	P
61.2	17.0	-	SLIP	-	-	-	M
65.2	17.0	-	SLIP	OFF	-	-	M
66.2	17.0	-	SLIP	-	-	-	M
69.2	17.0	-	STRUGGLE	-	-	-	X
72.2	17.0	-	SLIP	-	-	-	M
73.2	17.0	-	SLIP	-	-	-	M
76.2	17.0	-	SLIP	-	-	-	M
78.2	17.0	-	?	-	-	-	?
79.2	17.0	-	SLIP	-	-	-	M
82.2	17.0	-	SLIP	-	-	-	M
83.2	17.0	-	STUMBLE	DOWN	-	-	M
85.2	17.0	-	SLIDE	-	-	-	M
86.2	17.0	-	SLIP	-	-	-	M
87.2	17.0	-	SLIDE	-	-	-	M
88.2	17.0	-	CLIMB	ON TO	-	-	M

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
23.1	17.0	-	STUMBLE	ON	-	-	M
24.1	17.0	-	STUMBLE	ON	-	-	M
26.1	17.0	-	SLIP	-	-	-	M
28.1	17.0	-	SLIP	-	-	-	M
31.1	17.0	-	SLIP	-	-	-	M
32.1	17.0	-	SLIP	-	-	-	M
33.1	17.0	-	HIT	HIMSELF	-	-	X
34.1	17.0	-	SLIP	-	-	-	M
35.1	17.0	-	STEP	-	-	-	M
36.1	17.0	-	GO	TO	-	-	A
37.1	17.0	-	SCRAPE?	-	-	-	M
40.1	17.0	-	BEAT?	-	-	-	X
46.1	17.0	-	SLIDE	-	-	-	M
47.1	17.0	-	SLIP	-	-	-	M
62.1	17.0	-	SLIP	-	-	-	M
63.1	17.0	-	SLIP	-	-	-	M
66.1	17.0	-	SLIP	-	-	-	M
67.1	17.0	DECIDE	REST	-	-	-	X
70.1	17.0	START	REST	-	-	-	X
71.1	17.0	-	SLIP	-	-	-	M
72.1	17.0	-	SLIP	-	-	-	M
73.1	17.0	-	SLIP	-	-	-	M
74.1	17.0	-	SLIP	-	-	-	M
75.1	17.0	-	SLIP	-	-	-	M
82.1	17.0	-	SCRAMBLE?	-	-	-	M
83.1	17.0	-	CLIMB	-	-	-	M
85.1	17.0	DECIDE	JUMP	-	-	-	M

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
25.2	17.0	-	REACH	NEAR	-	-	P
26.2	17.0	-	SLIP	-	-	-	M
27.2	17.0	-	CRAWL	-	-	-	M
28.2	17.0	-	SLIP	-	-	-	M
29.2	17.0	-	SLIP	-	-	-	M
30.2	17.0	-	SLIP	-	-	-	M
31.2	17.0	-	STUMBLE	-	-	-	M
34.2	17.0	-	SLIP	-	-	-	M
35.2	17.0	TRY	?	-	-	-	?
36.2	17.0	-	SLIP	-	-	-	M
37.2	17.0	-	SCRAPE?	-	-	-	M
38.2	17.0	-	GO	-	-	-	A
40.2	17.0	-	SLIP	-	-	-	M
45.2	17.0	-	COME	ACROSS	-	-	P
46.2	17.0	-	SLIP	-	-	-	M
47.2	17.0	-	PASS	ON	-	-	P
48.2	17.0	-	SLIP	-	-	-	M
49.2	17.0	-	STOOP	-	-	-	X
63.2	17.0	-	SLIP	OVER	-	-	M
65.2	17.0	-	SLIP	-	-	-	M
66.2	17.0	-	SLIP	-	-	-	M
67.2	17.0	-	SLIP	-	-	-	M
68.2	17.0	-	LIE	DOWN	-	-	X
70.2	17.0	-	SLIP	-	-	-	M
71.2	17.0	-	SLIP	-	-	-	M
73.2	17.0	-	SLIP	-	-	-	M
74.2	17.0	-	SLIP	-	-	-	M
79.2	17.0	START	RUN	-	-	-	M
81.2	17.0	-	SLIP	-	-	-	M
82.2	17.0	-	SCRAMBLE?	-	-	-	M
87.2	17.0	HAVE TO	SLIP	-	-	-	M

(17) ...FELL ON a rock and bruised his leg

N A T I V E S P E A K E R S

MT	101	171.fell on rock
	102	171.fell into ditch
	103	171.fell over rock
	104	171.fell down ditch
	105	171.fell
	106	171.fell
	107	171.(hurt knee)
	108	171.(bruised leg)
	109	171.fell
MT	201	171.fell off path on to rock
	202	171.fell off the path
	203	171.fell
	204	171.fell off path on to stones
	205	171.-
	206	171.fell into ditch
	207	171.(hurt his knee)
	208	171.fell
	209	171.fell off sides of path
	210	171.hit against rock
	211	171.fell on to rocks
	212	171.-
	213	171.fell down a ditch
	214	171.fell on to rocks
	215	171.(bruised his leg)
	216	171.(bumped his leg on rock)
	217	171.-
	218	171.fell off path
	219	171.fell down
	220	171.fell in river [!]
	221	171.(bruised knee)
	222	171.(bruised leg)
	223	171.(bruised arm on rocks)
	224	171.(bruised his knee)

LUO SPEAKERS - 1ST RETELLING

Subj Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1 17.1	-	FALL	DOWN	-	-	P
33.1 17.1	-	COLLAPSE	DOWN	-	-	X
34.1 17.1	-	FALL	DOWN	-	-	P
35.1 17.1	-	FALL	DOWN	-	-	P
36.1 17.1	-	FALL	DOWN	-	-	P
37.1 17.1	-	FALL	DOWN	-	-	P
38.1 17.1	-	FALL	ON	-	-	P
39.1 17.1	-	FALL	INTO	-	-	P
40.1 17.1	-	FALL	DOWN	-	-	P
41.1 17.1	-	FALL	DOWN	-	-	P
42.1 17.1	-	FALL	-	-	-	P
46.1 17.1	-	FALL	DOWN	STAGGER?	-	P
47.1 17.1	-	FALL	DOWN	-	-	P
48.1 17.1	-	FALL	-	-	-	P
51.1 17.1	-	FALL	OFF	-	-	P
52.1 17.1	-	FALL	DOWN	-	-	P
53.1 17.1	-	FALL	-	-	-	P
54.1 17.1	-	FALL	DOWN	-	-	P
55.1 17.1	-	FALL	DOWN	-	-	P
56.1 17.1	-	FALL	DOWN	-	-	P
58.1 17.1	-	FALL	-	-	-	P
61.1 17.1	-	FALL	-	-	-	P
62.1 17.1	-	FALL	DOWN	-	-	P
63.1 17.1	-	FALL	DOWN	-	-	P
64.1 17.1	-	FALL	DOWN	-	-	P
67.1 17.1	-	FALL	DOWN	-	-	P
68.1 17.1	-	DROP	DOWN	-	-	M
69.1 17.1	-	FALL	DOWN	-	-	P
70.1 17.1	-	DROP	-	-	-	M
72.1 17.1	-	FALL	DOWN	-	-	P
73.1 17.1	-	FALL?	-	-	-	P
74.1 17.1	-	FALL	DOWN	-	-	P
75.1 17.1	-	FALL	-	-	-	P
76.1 17.1	-	FALL	-	-	-	P
77.1 17.1	-	FALL	DOWN	-	-	P
79.1 17.1	-	FALL	DOWN	-	-	P
80.1 17.1	-	FALL	DOWN	-	-	P
81.1 17.1	-	FALL	DOWN	-	-	P
82.1 17.1	-	FALL	-	-	-	P
83.1 17.1	-	FALL	-	-	-	P
84.1 17.1	-	FALL	DOWN	-	-	P
85.1 17.1	-	FALL	DOWN	-	-	P
86.1 17.1	-	FALL	DOWN	-	-	P

LUO SPEAKERS - 2ND RETELLING

Subj Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.2 17.1	-	COLLAPSE	DOWN	-	-	X
34.2 17.1	-	FALL	DOWN	-	-	P
35.2 17.1	-	FALL	DOWN	-	-	P
36.2 17.1	-	FALL	DOWN	-	-	P
37.2 17.1	-	FALL	-	-	-	P
38.2 17.1	-	FALL	ON	-	-	P
39.2 17.1	-	FALL	INTO	-	-	P
40.2 17.1	-	FALL	ON	-	-	P
46.2 17.1	-	FALL	DOWN	-	-	P
47.2 17.1	-	FALL	DOWN	-	-	P
48.2 17.1	-	FALL	DOWN	-	-	P
51.2 17.1	-	FALL	-	-	-	P
52.2 17.1	-	FALL	DOWN	-	-	P
53.2 17.1	-	FALL	-	-	-	P
54.2 17.1	-	FALL	DOWN	-	-	P
55.2 17.1	-	FALL	-	-	-	P
56.2 17.1	-	FALL	-	-	-	P
58.2 17.1	-	FALL	DOWN	-	-	P
61.2 17.1	-	FALL	DOWN	-	-	P
62.2 17.1	-	FALL	DOWN	-	-	P
63.2 17.1	-	SLIP	OVER	-	-	M
65.2 17.1	-	FALL	DOWN	-	-	P
66.2 17.1	-	FALL	DOWN	-	-	P
67.2 17.1	-	FALL	DOWN	-	-	P
68.2 17.1	-	FALL	DOWN	-	-	P
69.2 17.1	-	FALL	DOWN	-	-	P
72.2 17.1	-	FALL	DOWN	-	-	P
75.2 17.1	-	FALL	DOWN	-	-	P
76.2 17.1	-	FALL	DOWN	INTO	-	P
77.2 17.1	-	FALL	ON	-	-	P
78.2 17.1	-	FALL	-	-	-	P
79.2 17.1	-	FALL	-	-	-	P
80.2 17.1	-	FALL	ON	-	-	P
81.2 17.1	-	FALL	DOWN	OVER	-	P
82.2 17.1	-	FALL	DOWN		-	P
84.2 17.1	-	FALL	DOWN	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	17.1	-	FALL	DOWN	-	-	P
23.1	17.1	-	FALL	DOWN	-	-	P
25.1	17.1	-	FALL	DOWN	-	-	P
26.1	17.1	-	KNOCK	DOWN	-	-	M
28.1	17.1	-	FALL	INTO	-	-	P
29.1	17.1	-	FALL	DOWN	-	-	P
30.1	17.1	-	FALL	DOWN	-	-	P
31.1	17.1	-	FALL	DOWN	-	-	P
32.1	17.1	TRY	CLIMB	-	-	-	M
33.1	17.1	-	FALL	DOWN	-	-	P
34.1	17.1	-	FALL	DOWN	-	-	P
35.1	17.1	-	KNOCK	DOWN	-	-	M
36.1	17.1	-	FALL	ON	-	-	P
37.1	17.1	-	KNOCK	-	-	-	M
38.1	17.1	-	FALL	DOWN	-	-	P
39.1	17.1	-	FALL	INTO	-	-	P
40.1	17.1	-	FALL	DOWN	-	-	P
41.1	17.1	-	FALL	DOWN	-	-	P
42.1	17.1	-	FALL	-	-	-	P
43.1	17.1	-	FALL	DOWN	-	-	P
44.1	17.1	-	FALL	-	-	-	P
45.1	17.1	-	FALL	DOWN	-	-	P
46.1	17.1	-	FAINT	DOWN	-	-	M
61.1	17.1	-	FALL	DOWN	-	-	P
62.1	17.1	-	FALL	DOWN	-	-	P
64.1	17.1	-	FALL	DOWN	-	-	P
65.1	17.1	-	FALL	DOWN	-	-	P
67.1	17.1	-	FALL	DOWN	-	-	P
68.1	17.1	-	FALL	DOWN	-	-	P
69.1	17.1	-	FALL	DOWN	-	-	P
71.1	17.1	-	FALL	DOWN	-	-	P
73.1	17.1	-	FALL	-	-	-	P
74.1	17.1	-	FALL	DOWN	-	-	P
75.1	17.1	-	FALL	DOWN	-	-	P
76.1	17.1	-	FALL	DOWN	-	-	P
78.1	17.1	-	FALL	DOWN	-	-	P
79.1	17.1	-	FALL	DOWN	-	-	P
81.1	17.1	-	FALL	-	-	-	P
82.1	17.1	-	FALL	DOWN	-	-	P
83.1	17.1	-	FALL	DOWN	-	-	P
84.1	17.1	-	FALL	DOWN	-	-	P
86.1	17.1	-	FALL	DOWN	-	-	P
88.1	17.1	-	FALL	DOWN	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	17.1	-	FALL	DOWN	-	-	P
23.2	17.1	-	FALL	DOWN	-	-	P
24.2	17.1	-	FALL	DOWN	-	-	P
29.2	17.1	-	FALL	DOWN	-	-	P
31.2	17.1	-	FALL	DOWN	-	-	P
32.2	17.1	-	FALL	DOWN	-	-	P
33.2	17.1	-	FALL	ON	-	-	P
34.2	17.1	-	FALL	DOWN	-	-	P
35.2	17.1	-	FALL	DOWN	-	-	P
37.2	17.1	-	FALL	-	-	-	P
38.2	17.1	-	FALL	DOWN	-	-	P
39.2	17.1	-	FALL	INTO	-	-	P
40.2	17.1	-	FALL	DOWN	-	-	P
41.2	17.1	-	FALL	DOWN	-	-	P
43.2	17.1	-	FALL	DOWN	-	-	P
44.2	17.1	-	FALL	DOWN	-	-	P
45.2	17.1	-	FALL	DOWN	-	-	P
46.2	17.1	-	FALL	DOWN	-	-	P
61.2	17.1	-	FALL	DOWN	-	-	P
62.2	17.1	-	FALL	DOWN	-	-	P
63.2	17.1	-	FALL	DOWN	-	-	P
64.2	17.1	-	FALL	-	-	-	P
65.2	17.1	-	FALL	ON TO	-	-	P
68.2	17.1	-	FALL	DOWN	-	-	P
69.2	17.1	-	FALL	DOWN	-	-	P
71.2	17.1	-	FALL	DOWN	-	-	P
76.2	17.1	-	FALL	-	-	-	P
78.2	17.1	-	?	-	-	-	?
79.2	17.1	-	FALL	DOWN	-	-	P
81.2	17.1	-	FALL	-	-	-	P
84.2	17.1	-	FALL	DOWN	-	-	P
85.2	17.1	-	FALL	DOWN	-	-	P
87.2	17.1	-	FALL	DOWN	-	-	P

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	17.1	-	FALL	DOWN	-	-	P
22.1	17.1	-	FALL	DOWN ON	-	-	P
23.1	17.1	-	FALL	-	-	-	P
24.1	17.1	-	FALL	DOWN	-	-	P
25.1	17.1	-	FALL	OVER	-	-	P
26.1	17.1	-	FALL	ON	-	-	P
27.1	17.1	-	FALL	DOWN	-	-	P
28.1	17.1	-	FALL	DOWN	-	-	P
30.1	17.1	-	FALL	-	-	-	P
31.1	17.1	-	FALL	-	-	-	P
32.1	17.1	-	FALL	DOWN	-	-	P
33.1	17.1	-	FALL	DOWN	-	-	P
34.1	17.1	-	FALL	DOWN	-	-	P
35.1	17.1	-	FALL?	DOWN	-	-	P
38.1	17.1	-	FALL	DOWN	-	-	P
40.1	17.1	-	FALL	DOWN	-	-	P
41.1	17.1	-	FALL	DOWN	-	-	P
42.1	17.1	-	FALL	DOWN	-	-	P
43.1	17.1	-	FALL?	-	-	-	P
45.1	17.1	-	FALL	DOWN	-	-	P
46.1	17.1	-	FALL	ON	-	-	P
47.1	17.1	-	FALL	-	-	-	P
48.1	17.1	-	FALL	DOWN	-	-	P
50.1	17.1	-	FALL	DOWN	-	-	P
51.1	17.1	HAVE TO	FALL	DOWN	-	-	P
61.1	17.1	-	FALL	DOWN	-	-	P
62.1	17.1	-	FALL	DOWN	-	-	P
63.1	17.1	-	FALL	-	-	-	P
64.1	17.1	-	FALL	DOWN	-	-	P
65.1	17.1	-	FALL	DOWN	-	-	P
66.1	17.1	-	FALL	-	-	-	P
68.1	17.1	-	FALL	DOWN	-	-	P
69.1	17.1	-	FALL	DOWN	-	-	P
71.1	17.1	-	FALL	DOWN	-	-	P
72.1	17.1	-	DROP	DOWN	-	-	P
73.1	17.1	-	FALL	DOWN	-	-	P
74.1	17.1	-	FALL	ON	-	-	P
81.1	17.1	-	FALL	DOWN	-	-	P
82.1	17.1	-	FALL	DOWN	-	-	P

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	17.1	-	FALL	DOWN	-	-	P
22.2	17.1	-	FALL	OVER	-	-	P
24.2	17.1	-	FALL	DOWN	-	-	P
25.2	17.1	-	FALL	FROM	-	-	P
27.2	17.1	-	FALL	DOWN	-	-	P
28.2	17.1	-	FALL	DOWN	-	-	P
29.2	17.1	-	FALL	-	-	-	P
30.2	17.1	-	FALL	-	-	-	P
31.2	17.1	-	FALL	DOWN	-	-	P
33.2	17.1	-	FALL	ON	-	-	P
34.2	17.1	-	FALL	DOWN	-	-	P
35.2	17.1	-	FALL	DOWN	-	-	P
36.2	17.1	-	FALL	DOWN	-	-	P
38.2	17.1	-	FALL	-	-	-	P
39.2	17.1	-	FALL	DOWN	-	-	P
40.2	17.1	-	FALL	DOWN	-	-	P
41.2	17.1	-	FALL	DOWN	-	-	P
42.2	17.1	-	FALL	DOWN	-	-	P
44.2	17.1	-	FALL	-	-	-	P
45.2	17.1	-	FALL	ON	-	-	P
46.2	17.1	-	FALL	-	-	-	P
47.2	17.1	-	FALL	-	-	-	P
48.2	17.1	-	FALL	DOWN	-	-	P
49.2	17.1	-	FALL	DOWN	-	-	P
50.2	17.1	-	SLIP	DOWN	-	-	M
51.2	17.1	HAVE TO	FALL	DOWN	-	-	P
61.2	17.1	-	FALL	-	-	-	P
65.2	17.1	-	FALL	ON	-	-	P
66.2	17.1	-	FALL	-	-	-	P
69.2	17.1	-	FALL	DOWN	-	-	P
71.2	17.1	-	FALL	DOWN	-	-	P
72.2	17.1	-	FALL	DOWN	-	-	P
73.2	17.1	-	FALL	DOWN	-	-	P
74.2	17.1	HAVE TO	FALL	IN	-	-	P
78.2	17.1	-	FALL	DOWN	-	-	P
79.2	17.1	-	DROP	DOWN	-	-	P
81.2	17.1	-	FALL	-	-	-	P
82.2	17.1	-	FALL	DOWN	-	-	P
83.2	17.1	-	FALL	DOWN	-	-	P
84.2	17.1	-	FALL	ON	-	-	P
87.2	17.1	-	FALL	DOWN	-	-	P

(18) Eventually he CRAWLED BACK ON to the path...

N A T I V E S P E A K E R S

MT 101 18.managed to crawl back
102 18.managed to crawl out
103 18.climbed back on...
104 18.got up again
105 18.managed to crawl up
106 18.climbed up
107 18.scrambled up
108 18.managed to get up
109 18.crawled back up

MT 201 18.climbed back up on to path
202 18.tried to stand up
203 18.?turned up
204 18.-
205 18.managed to get himself up
206 18.climbed out
207 18.climbed up on to path
208 18.climbed up
209 18.managed to stumble back up
210 18.-
211 18.climbed up...scrambled up to
212 18.managed to pull himself up
213 18.eventually got up
214 18.(hurt his leg)
215 18.-
216 18.able to stumble back ?out of
217 18.got back over [stream
218 18.-
219 18.staggered up the path
220 18.had to come out again
221 18.got up
222 18.-
223 18.managed to get to other side
224 18.managed to get on his feet

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	18.0	-	WALK	WITH	-	-	M
33.1	18.0	-	WAKE	UP	-	-	X
34.1	18.0	-	TRY	-	STAND	-	X
35.1	18.0	-	CRAWL	-	-	-	M
36.1	18.0	-	WALK	SLOWLY	-	-	M
37.1	18.0	START	SLIDE	-	-	-	M
38.1	18.0	-	?	-	-	-	?
40.1	18.0	-	CRAWL	-	GET	BACK TO	M
41.1	18.0	STRUGGLE	STAND	UP	-	-	X
42.1	18.0	-	CRAWL	-	GET	BACK	M
48.1	18.0	-	WAKE	UP	-	-	X
50.1	18.0	-	CRAWL	-	-	-	M
51.1	18.0	-	STAND	UP SLOWLY	-	-	X
53.1	18.0	DECIDE	CREEP	-	-	-	M
54.1	18.0	-	LOOK	FOR	GET	OUT	X
57.1	18.0	TRY	CRAWL	-	-	-	M
61.1	18.0	DECIDE	CRAWL	-	-	-	M
62.1	18.0	TRY	MAKE WAY	THROUGH	-	-	X
64.1	18.0	DECIDE	CRAWL	-	-	-	M
67.1	18.0	TRY	MOVE?	-	CRAWL	-	A
68.1	18.0	HAVE TO	CRAWL	-	-	-	M
69.1	18.0	-	CRAWL	-	-	-	M
71.1	18.0	-	CRAWL	-	-	-	M
72.1	18.0	-	CREEP	-	-	-	M
73.1	18.0	-	GET	UP	-	-	A
74.1	18.0	-	CRAWL	-	-	-	M
76.1	18.0	MANAGE	COME	OUT	-	-	P
77.1	18.0	-	CREEP	-	-	-	M
79.1	18.0	-	GET	UP	-	-	A
80.1	18.0	TRY	ROLL	SLOWLY	-	-	M
81.1	18.0	DECIDE	WALK	-	-	-	M
82.1	18.0	-	STAND	-	-	-	M
83.1	18.0	-	CRAWL	-	-	-	M
84.1	18.0	TRY	CLIMB	OVER	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	18.0	START	LIMP	-	-	-	M
33.2	18.0	-	ROLL	OVER	-	-	M
35.2	18.0	TRY	STAND	UP	-	-	X
36.2	18.0	-	WALK	BY HANDS	-	-	M
37.2	18.0	-	STAND	UP	-	-	X
38.2	18.0	TRY	CRAWL	UP TO	-	-	M
39.2	18.0	-	CREEP	UP	-	-	M
40.2	18.0	TRY	CRAWL	-	GET	BACK	M
41.2	18.0	-	SCRAMBLE	-	COME	OUT	M
47.2	18.0	MANAGE	CLIMB	OVER	-	-	M
48.2	18.0	TRY	GET	BACK INTO	-	-	A
51.2	18.0	-	STAND	UP	-	-	X
52.2	18.0	DECIDE	CRAWL	-	-	-	M
53.2	18.0	-	CREEP	-	-	-	M
54.2	18.0	DECIDE	MOVE	ON	-	-	A
55.2	18.0	-	CLIMB?	-	-	-	M
56.2	18.0	-	STAND	UP	-	-	X
57.2	18.0	-	SCRAMBLE	-	-	-	M
61.2	18.0	-	CRAWL	-	-	-	M
62.2	18.0	MANAGE	GET WAY	-	-	-	A
64.2	18.0	DECIDE	CRAWL	OVER	-	-	M
65.2	18.0	COULD NOT	WALK	-	-	-	M
66.2	18.0	-	SCRAMBLE	OVER	-	-	M
67.2	18.0	-	CRAWL?	-	STAND	UP	M
69.2	18.0	-	CRAWL	ALONG	-	-	M
72.2	18.0	MANAGE	WAKE	UP	-	-	X
73.2	18.0	-	CLIMB	-	-	-	M
74.2	18.0	-	CRAWL	OVER	-	-	M
76.2	18.0	MANAGE	CRAWL	-	COME	OUT	M
78.2	18.0	TRY	GO	OVER	-	-	A
82.2	18.0	STRUGGLE?	COME	UP	-	-	P
84.2	18.0	-	CRAWL	UP TO	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	18.0	TRY	FIGHT	WITH	-	-	M
22.1	18.0	-	CRAWL	-	-	-	M
23.1	18.0	-	CRAWL	UP TO	-	-	M
24.1	18.0	START	CRAWL	-	-	-	M
25.1	18.0	TRY	CLIMB	-	-	-	M
28.1	18.0	TRY	CLIMB	-	-	-	M
31.1	18.0	-	CRAWL	-	-	-	M
32.1	18.0	HAVE TO	CRAWL	DOWN	-	-	M
33.1	18.0	START	CRAWL	-	-	-	M
34.1	18.0	DECIDE	WAKE	UP	-	-	M
35.1	18.0	TRY	CRAWL	DOWN	-	-	M
38.1	18.0	-	CRAWL	-	-	-	M
39.1	18.0	-	STRUGGLE	-	GO	OUT	M
40.1	18.0	-	CRAWL	TO	-	-	M
43.1	18.0	-	STAND	UP	-	-	M
44.1	18.0	TRY	MOVE	WITH	-	-	A
45.1	18.0	-	CLIMB	-	-	-	M
61.1	18.0	-	CRAWL	-	-	-	M
62.1	18.0	-	CRAWL	UP	-	-	M
63.1	18.0	MANAGE	COME	OUT OF	-	-	P
64.1	18.0	CONTINUE	CLIMB	-	-	-	M
65.1	18.0	-	CRAWL	OVER	-	-	M
67.1	18.0	-	WAKE	UP	-	-	M
68.1	18.0	-	WALK	-	-	-	M
69.1	18.0	-	STRUGGLE	-	-	-	X
71.1	18.0	DECIDE	CRAWL	-	-	-	M
73.1	18.0	TRY	CRAWL	DOWN	-	-	M
74.1	18.0	STRUGGLE	CRAWL	ALONG	-	-	M
75.1	18.0	-	CRAWL	-	-	-	M
76.1	18.0	-	WAKE	UP	-	-	M
77.1	18.0	HAVE TO	CRAWL	DOWN	-	-	M
78.1	18.0	START	CLIMB	-	-	-	M
79.1	18.0	TRY	GO	TO	-	-	A
81.1	18.0	MANAGE	CRAWL	-	-	-	M
83.1	18.0	-	CRAWL	-	-	-	M
85.1	18.0	TRY	WAKE	UP	-	-	M
87.1	18.0	-	TRY	-	-	-	X

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	18.0	-	SCRAMBLE	-	MOVE	FROM	M
22.2	18.0	-	CLIMB	ON	CRAWL	-	M
23.2	18.0	-	CRAWL	TO	-	-	M
25.2	18.0	-	PASS	-	-	-	P
29.2	18.0	-	PASS	TO	-	-	P
31.2	18.0	-	CRAWL	-	-	-	M
33.2	18.0	START	CRAWL	-	-	-	M
34.2	18.0	DECIDE	ROLL	SLOWLY	-	-	M
35.2	18.0	-	CRAWL	DOWN	-	-	M
37.2	18.0	-	WALK	-	GET	ON	M
38.2	18.0	-	CRAWL	-	GET	UP ON	M
39.2	18.0	-	SCRAMBLE	-	-	-	M
40.2	18.0	-	CRAWL	OVER	-	-	M
43.2	18.0	-	CRAWL	-	-	-	M
44.2	18.0	-	SCRAMBLE	-	-	-	M
45.2	18.0	-	WAKE	UP	CLIMB	-	M
61.2	18.0	-	CRAWL	UP TO	-	-	M
62.2	18.0	-	CRAWL	UP	-	-	M
63.2	18.0	STRUGGLE	COME	BACK	-	-	P
64.2	18.0	-	CLIMB	-	-	-	M
65.2	18.0	-	CRAWL	BACK ON TO	-	-	M
66.2	18.0	-	CRAWL	-	-	-	M
68.2	18.0	-	CRAWL	-	-	-	M
71.2	18.0	START	WAKE	UP	-	-	M
73.2	18.0	TRY	WAKE	UP	CRAWL	-	M
77.2	18.0	TRY	CRAWL	DOWN	-	-	M
78.2	18.0	HAVE TO	CRAWL	-	-	-	M
79.2	18.0	TRY	GO	BACK	PUSH	-	A
80.2	18.0	TRY	STAND	UP	-	-	M
81.2	18.0	MANAGE	CRAWL	-	-	-	M
82.2	18.0	TRY	WAKE	UP	-	-	M
83.2	18.0	-	WAKE	UP	-	-	M
85.2	18.0	STRUGGLE	WAKE	UP	-	-	M

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	18.0	-	WAKE	UP	-	-	X
22.1	18.0	TRY	STAND	UP	-	-	X
23.1	18.0	-	CRAWL	-	STAND	UP	M
26.1	18.0	TRY	STAND	-	-	-	X
27.1	18.0	-	JUMP	OVER	-	-	M
28.1	18.0	-	CLIMB	-	-	-	M
30.1	18.0	-	CRAWL	-	GO	BACK	M
32.1	18.0	-	CRAWL	UP TO	-	-	M
34.1	18.0	TRY	WAKE	UP	WALK	-	X
35.1	18.0	TRY	WAKE	UP	-	-	X
37.1	18.0	-	COME	UP SLOWLY	-	-	P
38.1	18.0	TRY	CRAWL	-	-	-	M
39.1	18.0	START	SCRAMBLE?	DOWN	-	-	M
40.1	18.0	TRY	STAND	UP	-	-	X
41.1	18.0	-	GO	-	-	-	A
42.1	18.0	START	WALK	ON KNEES	-	-	M
45.1	18.0	-	?	-	GO	BACK	?
46.1	18.0	-	CRAWL	THROUGH	-	-	M
47.1	18.0	-	WAIT?	-	-	-	X
48.1	18.0	-	COME	UP	-	-	P
50.1	18.0	-	CRAWL	-	-	-	M
51.1	18.0	START	CRAWL?	-	-	-	M
61.1	18.0	-	STRUGGLE	-	STAND	-	M
62.1	18.0	STRUGGLE	REACH	-	-	-	P
63.1	18.0	-	CLIMB	OVER	COME	BACK	M
64.1	18.0	TRY	STRUGGLE	DOWN	-	-	M
65.1	18.0	TRY	WAKE	UP	-	-	X
66.1	18.0	-	CLIMB	BACK	-	-	M
68.1	18.0	TRY	CRAWL	-	-	-	M
70.1	18.0	-	ROLL	OVER	-	-	M
72.1	18.0	-	WAKE	UP	-	-	X
73.1	18.0	TRY	STAND	UP	-	-	X
74.1	18.0	TRY	CRAWL	-	-	-	M
75.1	18.0	HAVE TO	LIE	DOWN	-	-	X
81.1	18.0	TRY	CRAWL	-	-	-	M
82.1	18.0	MANAGE	STAND	UP	-	-	X
83.1	18.0	STRUGGLE	WAKE	UP	-	-	X
84.1	18.0	-	CLIMB	-	-	-	M
85.1	18.0	START	CRAWL	SLOWLY	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.2	18.0	TRY	STAND	-	CRAWL	-	X
25.2	18.0	-	-CRAWL	OVER	-	-	M
27.2	18.0	-	-CRAWL	-	-	-	M
28.2	18.0	TRY	WAKE	UP	-	-	X
29.2	18.0	-	WAKE	UP	-	-	X
30.2	18.0	TRY	GET	UP	CRAWL	-	A
34.2	18.0	STRUGGLE	GET	UP	-	-	A
35.2	18.0	TRY	-CRAWL	FROM DOWN	-	-	M
36.2	18.0	MANAGE	-CRAWL	SLOWLY	-	-	M
37.2	18.0	-	COME	UP SLOWLY	-	-	P
38.2	18.0	TRY	-CRAWL	-	STAND	UP	M
39.2	18.0	-	-CRAWL	DOWN	-	-	M
41.2	18.0	-	WAKE	-	-	-	X
42.2	18.0	START	-CRAWL	TOWARDS	-	-	M
43.2	18.0	START	-CRAWL	DOWN	CLIMB	-	M
44.2	18.0	-	-CRAWL	-	-	-	M
45.2	18.0	MANAGE	MOVE	-	GO	TO	A
46.2	18.0	-	-CRAWL	-	-	-	M
48.2	18.0	-	WAKE	UP	-	-	X
49.2	18.0	START	GO	-	-	-	A
50.2	18.0	TRY	-CRAWL	ALONG	-	-	M
61.2	18.0	TRY	CLIMB	OVER	-	-	M
63.2	18.0	-	-CRAWL	OVER	COME	BACK TO	M
65.2	18.0	-	-CRAWL	-	STRG.STAND	-	M
66.2	18.0	-	CLIMB	BACK TO	-	-	M
68.2	18.0	-	-CRAWL	-	-	-	M
69.2	18.0	-	-CRAWL	OVER	-	-	M
70.2	18.0	-	CLIMB	OVER	-	-	M
72.2	18.0	-	WAKE	UP	-	-	X
73.2	18.0	-	-CRAWL	-	TRY WAKE	UP	M
74.2	18.0	TRY	-CRAWL	-	-	-	M
75.2	18.0	DECIDE	REST	-	-	-	X
78.2	18.0	TRY	CLIMB	OVER	-	-	M
81.2	18.0	MANAGE	-CRAWL	BACK	-	-	M
82.2	18.0	STRUGGLE	WAKE	UP	-	-	X
84.2	18.0	-	CLIMB	OVER	-	-	M
87.2	18.0	TRY	CONTINUE	-	-	-	?

(19) and then LIMPED AWAY from the unlucky spot

N A T I V E S P E A K E R S

MT	101	19.limped off
	102	19.stumble on
	103	19.walked on
	104	19.limping along
	105	19.walked..limped
	106	19.limping
	107	19.walking
	108	19.walking with stick
	109	19.(used stick to) limp along
MT	201	19.used stick to help him walk
	202	19.limping
	203	19.-
	204	19.(stick to help him carry on)
	205	19.walking again
	206	19.limped
	207	19.started to walk
	208	19.got stick...walked along
	209	19.(bruised his leg)
	210	19.walked along road
	211	19.hiked along path
	212	19.limped along
	213	19.walked....a stick to balance
	214	19.(stick to hold him up)
	215	19.tried to just hobble along
	216	19.continue with journey
	217	19.?
	218	19.walked along
	219	19.limped
	220	19.limped back
	221	19.strode on [!]
	222	19.(got stick) walked
	223	19.walked along
	224	19.went to the school

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	19.0	-	GO	ON	-	-	A
34.1	19.0	-	CONTINUE	-	-	-	T
35.1	19.0	-	GO	-	-	-	A
37.1	19.0	START	WALK	-	-	-	M
38.1	19.0	-	WALK	SLOWLY	-	-	M
40.1	19.0	-	WALK	-	-	-	M
41.1	19.0	-	WALK	-	-	-	M
46.1	19.0	START	WALK	HOME	-	-	M
48.1	19.0	START	LIMP	-	-	-	M
51.1	19.0	-	WALK	AGAIN	-	-	M
52.1	19.0	START	WALK	-	-	-	M
53.1	19.0	-	GO	-	-	-	A
54.1	19.0	-	WALK	-	-	-	M
55.1	19.0	START	WALK	SLOWLY	-	-	M
56.1	19.0	BEGIN	WALK	SLOWLY	-	-	M
57.1	19.0	-	WALK	-	-	-	M
58.1	19.0	START	WALK	SLOWLY	-	-	M
61.1	19.0	-	GO	-	LIMP	-	A
62.1	19.0	-	WALK	SLOWLY	-	-	M
64.1	19.0	-	WALK	-	-	-	M
66.1	19.0	TRY	WALK	-	-	-	M
67.1	19.0	-	CONTINUE	-	-	-	T
69.1	19.0	START	STAGGER	-	-	-	M
70.1	19.0	-	LIMP	-	-	-	M
73.1	19.0	START	WALK	-	-	-	M
74.1	19.0	START	LIMP	SLOWLY	-	-	M
75.1	19.0	START	LIMP	-	-	-	M
78.1	19.0	-	WALK	-	-	-	M
79.1	19.0	START	LIMP	-	-	-	M
80.1	19.0	START	LIMP	-	-	-	M
82.1	19.0	START	WALK	-	GO	-	M
84.1	19.0	-	FOLLOW	-	-	-	P
85.1	19.0	-	WALK	-	-	-	M
86.1	19.0	-	WALK	-	LIMP	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	19.0	-	WALK	-	-	-	M
33.2	19.0	-	CONTINUE	-	-	-	T
35.2	19.0	-	WALK	-	-	-	M
36.2	19.0	-	GO	-	-	-	A
37.2	19.0	START	WALK	-	-	-	M
39.2	19.0	START	WALK	-	-	-	M
40.2	19.0	-	WALK	-	-	-	M
41.2	19.0	-	WALK	-	-	-	M
46.2	19.0	START	WALK	-	-	-	M
47.2	19.0	-	?	-	-	-	?
48.2	19.0	-	LIMP	-	-	-	M
49.2	19.0	START	WALK	-	-	-	M
50.2	19.0	-	CARRY	SELF ON	-	-	X
51.2	19.0	-	WALK	ON	-	-	M
52.2	19.0	START	WALK	-	-	-	M
54.2	19.0	-	WALK	-	-	-	M
55.2	19.0	START	CRAWL	SLOWLY	-	-	M
56.2	19.0	BEGIN	WALK	SLOWLY	-	-	M
57.2	19.0	-	LIMP	SLOWLY	-	-	P
58.2	19.0	-	STAGGER	-	CONT..WALK	-	M
61.2	19.0	-	LIMP	-	-	-	M
62.2	19.0	-	LIMP	-	-	-	M
63.2	19.0	-	LIMP	-	-	-	M
64.2	19.0	COULD NOT	WALK	SO WELL	-	-	M
65.2	19.0	-	WALK	AHEAD	-	-	M
66.2	19.0	-	WALK	ALONG	-	-	M
67.2	19.0	DECIDE	CONTINUE	-	-	-	T
69.2	19.0	-	STAGGER	-	-	-	M
72.2	19.0	START	LIMP	-	-	-	M
73.2	19.0	STRUGGLE	LIMP	-	-	-	M
75.2	19.0	-	WALK	-	-	-	M
76.2	19.0	-	WALK	ALONG	-	-	M
78.2	19.0	COULD NOT	WALK	PROPERLY	-	-	M
79.2	19.0	START	LIMP	-	-	-	M
80.2	19.0	START	LIMP	-	-	-	M
82.2	19.0	START	WALK	-	-	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
23.1	19.0	-	WALK	-	-	-	M
24.1	19.0	START	WALK	-	-	-	M
25.1	19.0	-	GO	-	-	-	A
26.1	19.0	-	CONTINUE	-	LIMP	-	T
28.1	19.0	-	GO	WITH	-	-	A
29.1	19.0	-	WALK	-	-	-	M
30.1	19.0	-	GO	-	-	-	A
31.1	19.0	-	CONTINUE	-	-	-	T
33.1	19.0	-	GO	-	-	-	A
34.1	19.0	-	WALK	-	-	-	M
35.1	19.0	-	WALK	-	-	-	M
36.1	19.0	-	GO	-	LIMP	-	A
37.1	19.0	-	LIMP	-	-	-	M
38.1	19.0	-	WALK	-	-	-	M
39.1	19.0	-	LIMP	-	-	-	M
40.1	19.0	-	WALK	-	-	-	M
41.1	19.0	-	GO	-	-	-	A
42.1	19.0	-	GO	SLOWLY	-	-	A
43.1	19.0	-	LIMP	-	GO	-	M
44.1	19.0	-	MOVE	-	-	-	A
45.1	19.0	-	GO	SLOWLY	-	-	A
46.1	19.0	-	WALK	-	-	-	M
61.1	19.0	-	WALK	SLOWLY	-	-	M
62.1	19.0	START	MOVE	-	-	-	A
63.1	19.0	-	GO	SLOWLY	LIMP	-	A
65.1	19.0	MANAGE	WALK	-	-	-	M
66.1	19.0	-	GO	-	-	-	A
67.1	19.0	START	LIMP	-	-	-	M
68.1	19.0	-	WALK	-	-	-	M
69.1	19.0	-	CONTINUE	-	-	-	T
71.1	19.0	-	LIMP	-	-	-	M
73.1	19.0	-	LIMP	-	-	-	M
74.1	19.0	-	GO	ON	LIMP	-	A
75.1	19.0	-	GO	SLOWLY	LIMP	-	A
76.1	19.0	TRY	GO	-	-	-	A
77.1	19.0	-	MOVE	FURTHER	-	-	A
78.1	19.0	-	GO	-	-	-	A
79.1	19.0	-	MOVE	-	-	-	A
81.1	19.0	-	WALK	-	LIMP	-	M
82.1	19.0	-	LIMP	-	-	-	M
83.1	19.0	-	WALK	SLOWLY	-	-	M
84.1	19.0	-	WALK	UP	-	-	M
85.1	19.0	-	GO	-	LIMP	-	A

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.2	19.0	-	GO	-	-	-	A
24.2	19.0	START	WALK	-	-	-	M
27.2	19.0	-	RUN	ON	LIMP	-	M
28.2	19.0	-	GO	WITH	-	-	A
29.2	19.0	-	WALK	-	-	-	M
30.2	19.0	-	GO	-	-	-	A
31.2	19.0	-	WALK	-	-	-	M
32.2	19.0	-	LIMP	-	-	-	M
33.2	19.0	-	LIMP	-	FOLLOW	-	M
34.2	19.0	-	CONTINUE	-	-	-	T
37.2	19.0	-	SLIP	-	GET	HOLD OF	M
38.2	19.0	-	WALK	-	-	-	M
39.2	19.0	-	LIMP	-	-	-	M
40.2	19.0	TRY	WALK	-	-	-	M
42.2	19.0	-	WALK	-	-	-	M
43.2	19.0	-	WALK	-	-	-	M
44.2	19.0	-	WALK	-	-	-	M
45.2	19.0	START	GO	SLOWLY	-	-	A
46.2	19.0	-	WALK	-	-	-	M
62.2	19.0	-	WALK	-	-	-	M
63.2	19.0	-	LIMP	-	-	-	M
65.2	19.0	-	WALK	-	-	-	M
66.2	19.0	-	CONTINUE	-	-	-	T
68.2	19.0	-	WALK	-	-	-	M
69.2	19.0	-	WALK	SLOWLY	-	-	M
71.2	19.0	-	LIMP	-	-	-	M
72.2	19.0	-	CONTINUE	-	-	-	T
73.2	19.0	-	LIMP	-	-	-	M
76.2	19.0	TRY	WALK	-	LIMP	-	M
77.2	19.0	TRY	MOVE	SLOWLY	-	-	A
78.2	19.0	-	?	-	-	-	?
79.2	19.0	-	LIMP	-	-	-	M
81.2	19.0	-	WALK	-	-	-	M
82.2	19.0	-	LIMP	-	GO	-	M
83.2	19.0	-	STROLL	SLOWLY	-	-	M
84.2	19.0	-	WALK	UP	-	-	M
85.2	19.0	-	CONTINUE	-	-	-	T
86.2	19.0	-	?	-	-	-	?
87.2	19.0	-	GO	SLOWLY	-	-	A

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	19.0	START	GO	ON	-	-	A
22.1	19.0	TRY	CONTINUE	-	-	-	T
23.1	19.0	START	GO	ON	-	-	A
24.1	19.0	START	WALK	SLOWLY	-	-	M
25.1	19.0	START	WALK	-	-	-	M
26.1	19.0	-	WALK	-	-	-	M
27.1	19.0	-	WALK	SLOWLY	-	-	M
28.1	19.0	-	WALK	-	-	-	M
30.1	19.0	TRY	WALK	-	-	-	M
31.1	19.0	-	WALK	-	-	-	M
33.1	19.0	START	GO	-	-	-	A
34.1	19.0	-	FOLLOW	-	-	-	P
35.1	19.0	-	WALK	-	-	-	M
37.1	19.0	-	CONTINUE	-	-	-	T
39.1	19.0	-	WALK	LIKEOLDMAN	-	-	M
40.1	19.0	-	WALK	-	-	-	M
41.1	19.0	START	WALK	-	-	-	M
42.1	19.0	START	WALK	-	-	-	M
43.1	19.0	START	WALK	-	-	-	M
46.1	19.0	START	GO	-	-	-	A
47.1	19.0	-	CONTINUE	-	-	-	T
48.1	19.0	START	WALK	-	-	-	M
49.1	19.0	-	GO	ON	-	-	A
50.1	19.0	-	WALK	-	-	-	M
51.1	19.0	START	WALK	SLOWLY	-	-	M
61.1	19.0	-	LIMP	-	-	-	M
62.1	19.0	TRY	WALK	-	-	-	M
63.1	19.0	-	LIMP	-	-	-	M
64.1	19.0	-	WALK	-	-	-	M
66.1	19.0	-	CONTINUE	-	-	-	T
67.1	19.0	HAVE TO	LIMP	-	-	-	M
68.1	19.0	-	CONTINUE	-	-	-	T
69.1	19.0	HAVE TO	WALK	-	LIMP	-	M
70.1	19.0	-	LEAVE	-	DRAG	-	P
71.1	19.0	START	LIMP	-	-	-	M
72.1	19.0	-	CREEP	-	-	-	M
74.1	19.0	BEGIN?	JOURNEY	SLOWLY	-	-	A
75.1	19.0	START	MOVE	-	LIMP	-	A
81.1	19.0	GET	GO	-	-	-	A
82.1	19.0	START	LIMP	-	-	-	M
83.1	19.0	-	WALK	-	-	-	M
85.1	19.0	-	GO	-	-	-	A
86.1	19.0	TRY	LIMP	-	-	-	M

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	19.0	-	CONTINUE	-	-	-	T
24.2	19.0	START	WALK	SLOWLY	-	-	M
25.2	19.0	START	WALK	AGAIN	-	-	M
26.2	19.0	-	WALK	-	-	-	M
27.2	19.0	-	WALK	-	-	-	M
31.2	19.0	-	WALK	-	-	-	M
35.2	19.0	-	WALK	-	-	-	M
36.2	19.0	START	GO	-	-	-	A
37.2	19.0	-	CREEP?	-	-	-	M
38.2	19.0	-	WALK	-	-	-	M
39.2	19.0	-	LIMP	-	GO	-	M
40.2	19.0	START	WALK	SLOWLY	-	-	M
42.2	19.0	START	WALK	-	-	-	M
43.2	19.0	-	WALK	-	-	-	M
44.2	19.0	-	CONTINUE	-	-	-	T
46.2	19.0	START	GO	-	-	-	A
47.2	19.0	-	CRIPPLE	-	-	-	X
49.2	19.0	-	GO	ON	-	-	A
50.2	19.0	-	WALK	-	-	-	M
61.2	19.0	-	GO	ALONG	-	-	A
63.2	19.0	-	LIMP	-	-	-	M
66.2	19.0	-	LIMP	-	-	-	M
67.2	19.0	-	WALK	-	-	-	M
68.2	19.0	DECIDE	CONTINUE	-	-	-	T
69.2	19.0	TRY	WALK	-	LIMP	-	M
70.2	19.0	-	TIPTOE	UP TO	-	-	M
71.2	19.0	START	LIMP	-	-	-	M
72.2	19.0	START	WALK	-	-	-	M
75.2	19.0	START	MOVE	-	-	-	A
78.2	19.0	START	WALK	-	-	-	M
81.2	19.0	-	LIMP	ALONG	-	-	M
82.2	19.0	-	WALK	ALONG	LIMP	-	M
83.2	19.0	START	STAGGER	-	GO	-	M
87.2	19.0	CONTINUE	LIMP	-	-	-	M

(20) He soon met his classmate John LEAVING his home

N A T I V E S P E A K E R S

MT	101	20.(met) leaving for school
	102	20.(came across)
	103	20.(met)
	104	20.(met)
	105	20.(came to)
	106	20.(met) coming out of house
	107	20.(see) coming out of house
	108	20.(met)
	109	20.(met) coming out of house
MT	201	20.coming out of house
	202	20.(met)
	203	20.(came to)
	204	20.(got to)
	205	20.(met friend)
	206	20.came out of his house
	207	20.(met) coming out of house
	208	20.see his friend
	209	20.(seen)
	210	20.(came to)
	211	20.(met)
	212	20.(met friend)
	213	20.(met)
	214	20.(met)
	215	20.(met friend)
	216	20.(met) leaving his house
	217	20.(met John)
	218	20.(saw)
	219	20.(saw John)
	220	20.-
	221	20.(came to)
	222	20.coming up to go to school
	223	20.(met up with) leaving for school
	224	20.(met)

LUO SPEAKERS - 1ST RETELLING

Subj Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.1 20.0	FIND	COME	-	-	-	P
34.1 20.0	-	COME	OUT FROM	-	-	P
40.1 20.0	-	COME	FROM	-	-	P
56.1 20.0	-	COME	OUT OF	-	-	P
57.1 20.0	-	COME	FROM	-	-	P
64.1 20.0	-	COME	FROM	-	-	P
81.1 20.0	-	COME	FROM	-	-	P
85.1 20.0	-	COME	FROM	-	-	P

LUO SPEAKERS - 2ND RETELLING

Subj Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
33.2 20.0	-	COME	-	-	-	P
34.2 20.0	-	COME	OUT FROM	-	-	P
38.2 20.0	-	GO	TO	-	-	A
39.2 20.0	-	COME	TO	-	-	P
40.2 20.0	-	COME	FROM	-	-	P
48.2 20.0	-	COME	INTO	-	-	P
56.2 20.0	-	COME	OUT FROM	-	-	P
57.2 20.0	-	COME	-	-	-	P
79.2 20.0	-	COME	FROM	-	-	P
81.2 20.0	-	GO	TO..FROM	-	-	A
82.2 20.0	-	COME	OUT OF	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
22.1	20.0	-	GO	TO	-	-	A
29.1	20.0	-	STAND	-	-	-	H
37.1	20.0	-	COME	FROM	-	-	P
38.1	20.0	-	COME	OUT	-	-	P
39.1	20.0	-	COME	OUT FROM	-	-	P
42.1	20.0	-	COME	FROM	-	-	P
45.1	20.0	-	COME	-	-	-	P
63.1	20.0	-	COME	FROM	-	-	P
73.1	20.0	-	COME	-	-	-	P
79.1	20.0	-	COME	FROM	-	-	P
81.1	20.0	-	COME	FROM	-	-	P
87.1	20.0	-	?	-	-	-	?

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
27.2	20.0	-	GO	-	-	-	A
33.2	20.0	-	GO	TO	-	-	A
38.2	20.0	-	COME	-	-	-	P
45.2	20.0	-	COME	-	-	-	P
46.2	20.0	-	COME	FROM	-	-	P
65.2	20.0	-	COME	OUT OF	-	-	P
79.2	20.0	-	COME	OUT	-	-	P
81.2	20.0	-	COME	FROM	-	-	P
84.2	20.0	-	LEAVE	-	-	-	P

LUNYORE SPEAKERS - 1ST RETELLING							LUNYORE SPEAKERS - 2ND RETELLING						
Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type	Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
27.1	20.0	-	COME	-	-	-	P								
								28.2	20.0	-	WALK	TOWARDS	-	-	M
								30.2	20.0	-	LEAVE	-	-	-	P
34.1	20.0	-	COME	-	-	-	P								
36.1	20.0	-	COME	-	-	-	P	36.2	20.0	-	COME	-	-	-	P
								43.2	20.0	-	LEAVE	-	-	-	P
								45.2	20.0	-	COME	FROM	-	-	P
								46.2	20.0	-	GO	TO	-	-	A
								47.2	20.0	-	COME	-	-	-	P
49.1	20.0	-	COME	-	-	-	P								
51.1	20.0	-	COME	-	-	-	P	51.2	20.0	-	COME	FROM	-	-	P
								63.2	20.0	-	COME	OUT OF	-	-	P
81.1	20.0	-	COME	FROM	-	-	P	79.2	20.0	-	COME	BACK	-	-	P

(21) John INVITED him IN to have a rest...

N A T I V E S P E A K E R S

MT 101 21.invited him in
102 21.invited in
103 21.came in for tea
104 21.went into house
105 21.asked him in
106 21.offered him to come in
107 21.asked him to go into house
108 21.like to come
109 21.invited him in

MT 201 21.invited him in
202 21.invited him
203 21.-
204 21.(stayed for a while)
205 21.(would you like to) come in
206 21.asked him in
207 21.invited him in
208 21.-
209 21.invited in
210 21.invited him in
211 21.invited in for tea
212 21.invited him in
213 21.-
214 21.invited him in
215 21.took him into house
216 21.offered him to go in and
217 21.took him in
218 21.invited him in
219 21.?invite him into house
220 21.invited him into house
221 21.invited him in
222 21.come in for tea
223 21.took him in
224 21.come in and rest

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	21.0	-	INVITE	IN	-	-	X
33.1	21.0	-	WELCOME	-	-	-	X
34.1	21.0	TELL	COME	-	-	-	X
35.1	21.0	-	INVITE	-	-	-	X
36.1	21.0	-	WELCOME	-	-	-	X
37.1	21.0	-	INVITE	-	ENTER	-	X
38.1	21.0	-	WELCOME	-	-	-	X
39.1	21.0	-	WELCOME	-	-	-	X
40.1	21.0	TELL	COME	-	REST	-	P
41.1	21.0	-	WELCOME	-	-	-	X
42.1	21.0	-	INVITE	TO	-	-	X
46.1	21.0	TELL	GET	INTO	-	-	A
48.1	21.0	TELL	COME	-	SHARE	-	P
49.1	21.0	-	WELCOME	-	-	-	X
50.1	21.0	-	INVITE	-	-	-	X
51.1	21.0	TELL	GET	INTO	-	-	A
52.1	21.0	-	CALL	-	-	-	X
53.1	21.0	TELL	ENTER	-	-	-	P
54.1	21.0	TELL	GO	IN	-	-	A
55.1	21.0	TELL	COME	-	REST	-	P
56.1	21.0	-	INVITE	FOR	-	-	X
57.1	21.0	-	WELCOME	-	-	-	X
58.1	21.0	-	CALL	-	TELL	-	X
61.1	21.0	-	WELCOME	INTO	-	-	X
62.1	21.0	-	WELCOME	-	ASK.GET	IN	X
63.1	21.0	-	WELCOME	-	-	-	X
64.1	21.0	-	WELCOME	TO	-	-	X
66.1	21.0	-	INVITE	FOR	-	-	X
67.1	21.0	-	WELCOME	-	-	-	X
68.1	21.0	-	WELCOME	-	-	-	X
69.1	21.0	-	INVITE	-	ENTER	-	X
70.1	21.0	TELL	HAVE REST	-	-	-	X
72.1	21.0	-	WELCOME	-	-	-	X
73.1	21.0	-	INVITE	-	-	-	X
74.1	21.0	TELL	COME	IN	-	-	P
75.1	21.0	-	INVITE	-	-	-	X
76.1	21.0	DECIDE	WELCOME	-	-	-	X
78.1	21.0	-	WELCOME	-	-	-	X
79.1	21.0	-	INVITE	-	-	-	X
80.1	21.0	-	INVITE	-	-	-	X
81.1	21.0	TELL	COME	IN	-	-	P
82.1	21.0	-	WELCOME	-	-	-	X
83.1	21.0	TELL	WALK	SLOWLY	-	-	M
84.1	21.0	-	WELCOME	-	-	-	X
85.1	21.0	CALL	GET	IN	-	-	A
86.1	21.0	-	WELCOME	-	-	-	X

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	21.0	-	INVITE	-	-	-	X
33.2	21.0	-	INVITE	-	-	-	X
35.2	21.0	-	INVITE	-	-	-	X
36.2	21.0	-	INVITE	-	ENTER	IN	X
37.2	21.0	-	WELCOME	-	-	-	X
38.2	21.0	-	WELCOME	-	-	-	X
39.2	21.0	-	WELCOME	IN	-	-	X
40.2	21.0	TELL	COME	-	REST	-	P
41.2	21.0	-	WELCOME	-	-	-	X
42.2	21.0	-	WELCOME	-	-	-	X
46.2	21.0	-	CALL	-	-	-	X
47.2	21.0	-	?	-	-	-	?
48.2	21.0	-	INVITE	INTO	-	-	X
49.2	21.0	-	GO	WITH...IN	WELCOME	-	A
50.2	21.0	-	INVITE	-	-	-	X
51.2	21.0	-	WELCOME	-	-	-	X
52.2	21.0	-	WELCOME	-	-	-	X
53.2	21.0	-	INVITE	FOR	-	-	X
54.2	21.0	-	WELCOME	-	-	-	X
56.2	21.0	-	INVITE	FOR	-	-	X
57.2	21.0	-	WELCOME	IN	-	-	X
58.2	21.0	-	WELCOME	-	CALL	TO	X
61.2	21.0	-	WELCOME	IN	-	-	X
62.2	21.0	-	WELCOME	INTO	-	-	X
63.2	21.0	-	INVITE	-	-	-	X
64.2	21.0	-	INVITE	TO	-	-	X
65.2	21.0	-	WELCOME	IN	-	-	X
66.2	21.0	-	INVITE	FOR	-	-	X
67.2	21.0	-	WELCOME	-	-	-	X
69.2	21.0	-	INVITE	IN	-	-	X
72.2	21.0	-	WELCOME	-	-	-	X
73.2	21.0	-	WELCOME	TO	-	-	X
74.2	21.0	-	WELCOME	-	-	-	X
75.2	21.0	-	INVITE	-	-	-	X
76.2	21.0	-	INVITE	-	-	-	X
77.2	21.0	-	INVITE	-	-	-	X
78.2	21.0	-	WELCOME	INTO	-	-	X
79.2	21.0	-	INVITE	TO	-	-	X
80.2	21.0	-	INVITE	IN	-	-	X
81.2	21.0	-	WELCOME	TO	-	-	X
82.2	21.0	-	WELCOME	INTO	-	-	X
84.2	21.0	-	WELCOME	-	-	-	X

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	21.0	ASK	COME	-	-	-	P
22.1	21.0	-	WELCOME	IN	-	-	X
23.1	21.0	-	WELCOME	IN	-	-	X
25.1	21.0	-	TAKE	TO	-	-	X
26.1	21.0	-	ACCOMPANY	TO	-	-	P
28.1	21.0	-	WELCOME	-	-	-	X
29.1	21.0	-	WELCOME	-	-	-	X
30.1	21.0	-	WELCOME	-	-	-	X
31.1	21.0	-	WELCOME	-	-	-	X
32.1	21.0	TELL	GO	-	-	-	A
33.1	21.0	START	CALL	-	-	-	X
34.1	21.0	-	WELCOME	-	-	-	X
35.1	21.0	-	WELCOME	TO	-	-	X
36.1	21.0	-	WELCOME	-	-	-	X
37.1	21.0	-	WELCOME	-	-	-	X
38.1	21.0	-	WELCOME	-	-	-	X
39.1	21.0	TELL	COME	-	-	-	P
40.1	21.0	-	WELCOME	INTO	-	-	X
41.1	21.0	-	WELCOME	-	-	-	X
42.1	21.0	-	WELCOME	-	-	-	X
43.1	21.0	-	WELCOME	-	-	-	X
44.1	21.0	-	WELCOME	INTO	-	-	X
45.1	21.0	CALL	COME	TO	-	-	P
46.1	21.0	-	INVITE	IN	-	-	X
61.1	21.0	-	WELCOME	TO	-	-	X
62.1	21.0	-	WELCOME	-	-	-	X
63.1	21.0	-	INVITE	-	-	-	X
64.1	21.0	-	WELCOME	-	-	-	X
65.1	21.0	-	INVITE	-	-	-	X
66.1	21.0	DECIDE	WELCOME	-	-	-	X
69.1	21.0	-	WELCOME	TO	-	-	X
71.1	21.0	-	WELCOME	-	-	-	X
72.1	21.0	-	WELCOME	-	-	-	X
73.1	21.0	-	WELCOME	-	-	-	X
74.1	21.0	-	INVITE	IN	-	-	X
75.1	21.0	-	TAKE	TO	-	-	X
76.1	21.0	-	TAKE	TO	-	-	X
77.1	21.0	-	WELCOME	-	-	-	X
79.1	21.0	-	WELCOME	TO	-	-	X
81.1	21.0	-	WELCOME	TO	-	-	X
82.1	21.0	-	WELCOME	-	-	-	X
83.1	21.0	-	WELCOME	INTO	-	-	X
84.1	21.0	-	WELCOME	TO	-	-	X
85.1	21.0	-	GO	TO	-	-	A
86.1	21.0	-	INVITE	TO	-	-	X
87.1	21.0	-	INVITE	-	-	-	X
88.1	21.0	-	WELCOME	-	-	-	X

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	21.0	-	WELCOME	-	-	-	X
22.2	21.0	-	WELCOME	IN	-	-	X
23.2	21.0	-	WELCOME	-	-	-	X
24.2	21.0	-	GO	TO	-	-	A
25.2	21.0	-	INVITE	-	GO	TO	X
27.2	21.0	-	WELCOME	TO	-	-	X
28.2	21.0	-	WELCOME	-	-	-	X
29.2	21.0	-	WELCOME	-	-	-	X
30.2	21.0	-	WELCOME	-	-	-	X
31.2	21.0	-	WELCOME	-	-	-	X
32.2	21.0	-	WELCOME	-	-	-	X
33.2	21.0	-	WELCOME	-	-	-	X
34.2	21.0	-	INVITE	-	-	-	X
35.2	21.0	-	WELCOME	-	-	-	X
37.2	21.0	ASK	COME	-	-	-	P
38.2	21.0	-	WELCOME	INTO	-	-	X
39.2	21.0	-	INVITE	-	-	-	X
40.2	21.0	-	WELCOME	-	-	-	X
41.2	21.0	-	WELCOME	-	-	-	X
42.2	21.0	-	WELCOME	-	-	-	X
43.2	21.0	-	INVITE	-	-	-	X
44.2	21.0	-	WELCOME	-	-	-	X
45.2	21.0	CALL	COME	TO	-	-	P
46.2	21.0	-	INVITE	IN	-	-	X
61.2	21.0	-	WELCOME	TO	-	-	X
62.2	21.0	-	WELCOME	-	-	-	X
63.2	21.0	-	INVITE	TO	-	-	X
64.2	21.0	-	INVITE	-	-	-	X
65.2	21.0	-	WELCOME	TO	-	-	X
66.2	21.0	-	WELCOME	-	-	-	X
68.2	21.0	-	INVITE	-	-	-	X
69.2	21.0	-	WELCOME	-	-	-	X
71.2	21.0	-	WELCOME	INSIDE	-	-	X
72.2	21.0	-	WELCOME	-	-	-	X
73.2	21.0	-	WELCOME	-	-	-	X
76.2	21.0	-	GO	TO	-	-	A
77.2	21.0	-	WELCOME	TO	-	-	X
78.2	21.0	-	WELCOME	-	-	-	X
79.2	21.0	-	WELCOME	TO	-	-	X
80.2	21.0	-	WELCOME	-	-	-	X
81.2	21.0	-	INVITE	TO	-	-	X
82.2	21.0	-	WELCOME	-	-	-	X
83.2	21.0	-	WELCOME	INTO	-	-	X
84.2	21.0	-	WELCOME	TO	-	-	X
85.2	21.0	-	WELCOME	-	-	-	X
86.2	21.0	-	INVITE	IN	-	-	X
87.2	21.0	-	INVITE	-	-	-	X
88.2	21.0	DECIDE	HELP	-	-	-	X

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	21.0	-	WELCOME	-	-	-	X
22.1	21.0	-	TAKE	TO	-	-	X
23.1	21.0	-	INVITE	-	-	-	X
24.1	21.0	-	CALL	-	-	-	X
25.1	21.0	-	WELCOME	IN	-	-	X
26.1	21.0	-	WELCOME	IN	-	-	X
27.1	21.0	-	WELCOME	-	TAKE	-	X
28.1	21.0	-	WELCOME	-	-	-	X
30.1	21.0	-	WELCOME	-	TELL ENTER	-	X
31.1	21.0	-	WELCOME	-	-	-	X
32.1	21.0	-	WELCOME	-	-	-	X
33.1	21.0	-	WELCOME	-	-	-	X
34.1	21.0	-	WELCOME	-	-	-	X
35.1	21.0	-	WELCOME	-	-	-	X
36.1	21.0	-	WELCOME	-	-	-	X
37.1	21.0	-	WELCOME	IN	-	-	X
38.1	21.0	-	WELCOME	IN	-	-	X
39.1	21.0	TELL	COME	TO	-	-	X
40.1	21.0	-	TAKE	TO	-	-	X
41.1	21.0	-	WELCOME	-	-	-	X
42.1	21.0	TELL	GO	HOME	-	-	A
43.1	21.0	TELL	COME	-	-	-	P
45.1	21.0	-	INVITE	-	-	-	X
48.1	21.0	-	WELCOME	-	-	-	X
49.1	21.0	-	GO	WITH	-	-	A
50.1	21.0	-	WELCOME	TO	-	-	X
51.1	21.0	TELL	GET	IN	-	-	A
61.1	21.0	-	INVITE	TO	-	-	X
62.1	21.0	-	WELCOME	-	-	-	X
63.1	21.0	-	WELCOME	-	-	-	X
64.1	21.0	-	WELCOME	-	-	-	X
65.1	21.0	-	WELCOME	-	-	-	X
66.1	21.0	-	WELCOME	-	-	-	X
67.1	21.0	-	INVITE	-	-	-	X
68.1	21.0	-	WELCOME	-	-	-	X
69.1	21.0	-	INVITE	-	-	-	X
70.1	21.0	-	WELCOME	-	-	-	X
71.1	21.0	-	INVITE	-	-	-	X
72.1	21.0	-	WELCOME	-	-	-	X
73.1	21.0	-	WELCOME	-	-	-	X
74.1	21.0	-	WELCOME	-	-	-	X
75.1	21.0	-	WELCOME	-	-	-	X
81.1	21.0	-	WELCOME	-	-	-	X
82.1	21.0	-	WELCOME	-	-	-	X
83.1	21.0	-	WELCOME	AT	-	-	X
84.1	21.0	-	WELCOME	-	-	-	X
85.1	21.0	-	WELCOME	-	-	-	X
86.1	21.0	-	WELCOME	-	-	-	X

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	21.0	-	WELCOME	-	-	-	X
22.2	21.0	-	WELCOME	TO	-	-	X
24.2	21.0	-	INVITE	-	-	-	X
25.2	21.0	-	INVITE	INTO	-	-	X
26.2	21.0	-	WELCOME	-	-	-	X
27.2	21.0	-	WELCOME	-	-	-	X
29.2	21.0	-	INVITE	-	-	-	X
30.2	21.0	-	INVITE	-	-	-	X
31.2	21.0	-	WELCOME	-	-	-	X
33.2	21.0	-	WELCOME	-	-	-	X
34.2	21.0	-	TAKE	UP TO	WELCOME	-	X
35.2	21.0	-	WELCOME	-	-	-	X
36.2	21.0	-	WELCOME	-	-	-	X
37.2	21.0	-	INVITE	IN	-	-	X
38.2	21.0	-	WELCOME	IN	-	-	X
39.2	21.0	-	GO	TO	-	-	A
40.2	21.0	-	TAKE	TO	-	-	X
41.2	21.0	-	WELCOME	-	-	-	X
43.2	21.0	-	WELCOME	-	-	-	X
44.2	21.0	-	INVITE	INTO	-	-	X
45.2	21.0	-	INVITE	-	-	-	X
46.2	21.0	-	WELCOME	IN	-	-	X
47.2	21.0	TELL	GO	WITH	-	-	A
49.2	21.0	-	CALL	FOR	-	-	X
50.2	21.0	-	WELCOME	-	-	-	X
51.2	21.0	-	WELCOME	-	HAVE.GET	IN	X
63.2	21.0	-	WELCOME	-	-	-	X
65.2	21.0	-	INVITE	INTO	-	-	X
66.2	21.0	-	WELCOME	-	-	-	X
67.2	21.0	-	INVITE	-	-	-	X
68.2	21.0	-	WELCOME	TO	-	-	X
69.2	21.0	-	CALL	-	-	-	X
70.2	21.0	-	INVITE	-	-	-	X
71.2	21.0	-	INVITE	-	-	-	X
72.2	21.0	-	INVITE	IN	-	-	X
74.2	21.0	-	INVITE	-	-	-	X
75.2	21.0	-	WELCOME	-	-	-	X
78.2	21.0	-	WELCOME	-	-	-	X
81.2	21.0	-	WELCOME	TO	-	-	X
82.2	21.0	-	WELCOME	INSIDE	-	-	X
83.2	21.0	-	WELCOME	AT	-	-	X
84.2	21.0	-	INVITE	TO	-	-	X

(22) Afterwards...Juma SET OFF for school with John

N A T I V E S P E A K E R S

MT 101 22.went to school
102 22.-
103 22.came out
104 22.going along road..chumming each
105 22.went with him [other
106 22.-
107 22.-
108 22.came back out again
109 22.-
MT 201 22.set off to school
202 22.?
203 22.ran to school
204 22.set off for school
205 22.walk
206 22.set off for school
207 22.walked to school
208 22.rushed to school
209 22.decided to go on h. way again
210 22.went to school
211 22.hurrying to school
212 22.left for school
213 22.made their way up town
214 22.left
215 22.tried to make their way to
216 22.leaving for the school
217 22.-
218 22.went to school
219 22.went to school
220 22.left off for school again
221 22.went to school
222 22.walked to school
223 22.headed to school again
224 22.went on their way to school

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	22.0	-	ESCORT	-	-	-	P
33.1	22.0	-	ESCORT	-	-	-	P
34.1	22.0	START	ESCORT	-	-	-	P
35.1	22.0	DECIDE	GO	WITH	-	-	A
36.1	22.0	DECIDE	GO	-	-	-	A
37.1	22.0	-	WALK	WITH	-	-	M
38.1	22.0	-	ESCORT	-	-	-	P
39.1	22.0	-	SET	OFF	-	-	T
40.1	22.0	-	ESCORT	-	-	-	P
42.1	22.0	-	BE	ON WAY	-	-	T
46.1	22.0	-	ESCORT	-	-	-	P
48.1	22.0	-	GO	-	HOLD	-	A
50.1	22.0	-	WALK	TO	-	-	M
51.1	22.0	DECIDE	WALK	-	GO	-	M
52.1	22.0	-	START	OFF TOG.W	-	-	T
54.1	22.0	DECIDE	ESCORT	-	-	-	P
55.1	22.0	-	COME	OUT	START	WALK	P
56.1	22.0	DECIDE	GO	-	-	-	A
57.1	22.0	DECIDE	GO	-	-	-	A
58.1	22.0	START	GO	-	-	-	A
61.1	22.0	DECIDE	GO	TO	-	-	A
62.1	22.0	DECIDE	GO	TO	-	-	A
63.1	22.0	-	ESCORT	-	-	-	P
64.1	22.0	-	GO	TOGETHER	-	-	A
66.1	22.0	-	ESCORT	-	-	-	P
67.1	22.0	START	MOVE	TO	-	-	A
68.1	22.0	-	SET	OFF FOR	-	-	T
69.1	22.0	-	TAKE	OUT	GO	TO	P
70.1	22.0	-	START	-	-	-	T
71.1	22.0	-	GO	-	-	-	A
72.1	22.0	-	ESCORT	-	-	-	P
73.1	22.0	DECIDE	GO	TOGETHER	-	-	A
74.1	22.0	-	GO	TOGETHER	-	-	A
75.1	22.0	-	TAKE OFF	TO	-	-	?
76.1	22.0	DECIDE	GIVE PUSH	-	-	-	X
77.1	22.0	-	GO	TOGETHER	-	-	A
78.1	22.0	DECIDE	MARCH	TO	-	-	M
79.1	22.0	DECIDE	ESCORT	-	-	-	P
80.1	22.0	-	RUSH	TO	-	-	M
81.1	22.0	-	PROCEED	TO	-	-	X
82.1	22.0	-	GO	OUT	-	-	A
83.1	22.0	DECIDE	JOIN	-	GO	TO	P
84.1	22.0	DECIDE	GO	TO	-	-	A
85.1	22.0	DECIDE	MOVE	TOGETHER	-	-	A
86.1	22.0	START	WALK	WITH	GO	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	22.0	-	ESCORT	-	-	-	P
33.2	22.0	-	START	-	-	-	T
34.2	22.0	-	ESCORT	-	-	-	P
35.2	22.0	DECIDE	GO	TO	-	-	A
36.2	22.0	TRY	GO	TO	-	-	A
37.2	22.0	-	MOVE	WITH	-	-	A
38.2	22.0	START	GO	TO	-	-	A
39.2	22.0	-	MOVE	-	GO	TO	A
40.2	22.0	-	LEAVE	FOR	-	-	P
41.2	22.0	-	ESCORT	-	-	-	P
42.2	22.0	-	BE	OFF TO	-	-	X
46.2	22.0	-	GO	TO	-	-	A
47.2	22.0	DECIDE	GO	TO	-	-	A
48.2	22.0	DECIDE	GO	BACK ON	-	-	A
49.2	22.0	-	GO	BACK THRO'	-	-	A
50.2	22.0	-	GO	TO	-	-	A
51.2	22.0	-	GO	WAY TO	-	-	A
52.2	22.0	-	START	OFF TOWARD	-	-	T
53.2	22.0	DECIDE	GO	TO	-	-	A
54.2	22.0	DECIDE	WALK	WITH	-	-	M
55.2	22.0	START	WALK	SLOWLY	-	-	M
56.2	22.0	DECIDE	GO	-	-	-	A
57.2	22.0	-	WALK	WITH	-	-	M
58.2	22.0	CONTINUE	WALK	TO	-	-	M
61.2	22.0	DECIDE	GO	TO	-	-	A
62.2	22.0	DECIDE	GO	-	MOVE	BACK	A
63.2	22.0	-	ESCORT	-	-	-	P
64.2	22.0	-	GO	TOGETHER	-	-	A
65.2	22.0	-	COME	OUT	GO	TO	P
66.2	22.0	-	ESCORT	UP TO	-	-	P
67.2	22.0	-	START	-	-	-	T
68.2	22.0	-	START	OFF FOR	-	-	T
69.2	22.0	-	ESCORT	-	-	-	P
71.2	22.0	-	GO	TO	-	-	A
72.2	22.0	-	ESCORT	-	-	-	P
73.2	22.0	DECIDE	ESCORT	-	-	-	P
74.2	22.0	-	GO	TOGETHER	-	-	A
75.2	22.0	-	WALK	TOGETHER	-	-	M
76.2	22.0	DECIDE	COME	OUT WITH	GO	TO	P
77.2	22.0	-	LEAVE	-	GO	TO	P
78.2	22.0	-	LEAVE	FOR	-	-	P
79.2	22.0	DECIDE	ESCORT	-	-	-	P
80.2	22.0	START	ESCORT	-	-	-	P
81.2	22.0	-	CONTINUE	-	-	-	T
82.2	22.0	START	WALK	TO	-	-	M
84.2	22.0	-	START	OFF FOR	-	-	T

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	22.0	-	GO	TO	-	-	A
22.1	22.0	-	START	-	-	-	T
23.1	22.0	-	GO	TO	-	-	A
24.1	22.0	-	GO	WITH	-	-	A
25.1	22.0	-	GO	TO	-	-	A
26.1	22.0	-	LEAD	BY	-	-	P
28.1	22.0	-	START	-	-	-	T
29.1	22.0	-	GO	TOGETHER	-	-	A
31.1	22.0	-	ESCORT	-	-	-	P
32.1	22.0	START	RUN	TO	-	-	M
33.1	22.0	-	ACCOMPANY	-	-	-	P
34.1	22.0	-	SET	OFF	-	-	T
35.1	22.0	DECIDE	GO	WITH	-	-	A
36.1	22.0	-	COME	OUT	ESCORT	-	P
37.1	22.0	-	ESCORT	-	-	-	P
38.1	22.0	TRY	GO	-	-	-	A
39.1	22.0	-	WALK	WITH	-	-	M
40.1	22.0	-	MOVE	BACK TO	-	-	A
41.1	22.0	-	ESCORT	-	-	-	P
42.1	22.0	-	GO	WITH	-	-	A
43.1	22.0	-	ESCORT	-	-	-	P
44.1	22.0	START	GO	-	COME	OUT OF	A
45.1	22.0	-	ESCORT	-	-	-	P
46.1	22.0	-	SHOW	-	-	-	X
61.1	22.0	-	ESCORT	-	-	-	P
62.1	22.0	-	ESCORT	-	-	-	P
63.1	22.0	DECIDE	GO	TO	-	-	A
64.1	22.0	-	ESCORT	-	-	-	P
65.1	22.0	-	ESCORT	-	-	-	P
66.1	22.0	DECIDE	ESCORT	-	-	-	P
67.1	22.0	-	START	BACK	-	-	T
68.1	22.0	DECIDE	WALK	TO	-	-	M
69.1	22.0	-	ESCORT	-	-	-	P
71.1	22.0	-	COME	OUT	GO	TO	P
72.1	22.0	-	ESCORT	-	-	-	P
74.1	22.0	-	ESCORT	TO	-	-	P
75.1	22.0	-	TAKE	-	SHOW	-	X
76.1	22.0	-	GO	TOGETHER	-	-	A
77.1	22.0	-	ESCORT	-	-	-	P
78.1	22.0	-	GO	-	ST.ESCORT	-	A
79.1	22.0	TELL	GO	TOGETHER	-	-	A
81.1	22.0	-	LEAVE	-	-	-	P
82.1	22.0	-	GO	TO	-	-	A
83.1	22.0	-	ESCORT	-	-	-	P
84.1	22.0	-	ESCORT	-	-	-	P
85.1	22.0	-	ACCOMPANY	-	START	-	P
86.1	22.0	-	ESCORT	-	-	-	P
87.1	22.0	-	ESCORT	-	-	-	P
88.1	22.0	-	ESCORT	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	22.0	-	GO	TOGETHER	-	-	A
22.2	22.0	-	ESCORT	TO	-	-	P
23.2	22.0	-	GO	TO	-	-	A
24.2	22.0	DECIDE	ESCORT	-	-	-	P
25.2	22.0	-	GO	TO	-	-	A
27.2	22.0	-	WALK	TO	-	-	M
28.2	22.0	-	GO	TO	-	-	A
29.2	22.0	-	GO	ALONG WITH	-	-	A
30.2	22.0	-	GO	WITH	-	-	A
31.2	22.0	-	ESCORT	-	-	-	P
32.2	22.0	START	GO	-	-	-	A
33.2	22.0	-	GO	WITH	-	-	A
34.2	22.0	-	LEAVE	FOR	-	-	P
35.2	22.0	-	GO	-	-	-	A
37.2	22.0	-	ESCORT	-	GO	TO	P
38.2	22.0	DECIDE	GO	TO	-	-	A
39.2	22.0	-	ESCORT	-	-	-	P
40.2	22.0	-	GO	TO	-	-	A
41.2	22.0	-	ESCORT	-	-	-	P
42.2	22.0	-	GO	-	-	-	A
43.2	22.0	-	ESCORT	-	-	-	P
45.2	22.0	-	LEAVE	-	GO	TO	P
46.2	22.0	-	GO	-	-	-	A
61.2	22.0	-	ESCORT	-	-	-	P
62.2	22.0	-	ESCORT	-	-	-	P
63.2	22.0	-	GO	TO	-	-	A
64.2	22.0	-	ESCORT	-	-	-	P
65.2	22.0	DECIDE	LEAVE	WITH	-	-	P
66.2	22.0	-	ESCORT	-	GO	TO	P
68.2	22.0	-	WALK	TOGETHER	-	TOWARDS	M
69.2	22.0	-	ESCORT	-	-	-	P
71.2	22.0	-	TAKE	OFF	-	TOGETHER	X
72.2	22.0	-	LEAVE	FOR	-	-	P
73.2	22.0	-	WALK	-	-	-	M
76.2	22.0	DECIDE	GO	TO	-	-	A
77.2	22.0	-	ESCORT	-	-	-	P
78.2	22.0	-	ESCORT	-	-	-	P
79.2	22.0	-	GO	TO	-	-	A
80.2	22.0	-	ESCORT	-	-	-	P
81.2	22.0	-	LEAVE	-	-	-	P
82.2	22.0	-	GO	BACK TO	-	-	A
83.2	22.0	-	ESCORT	TO	-	-	P
84.2	22.0	DECIDE	GO	TO	-	-	A
85.2	22.0	-	GO	TOGETHER	-	-	A
86.2	22.0	-	ESCORT	-	-	-	P
87.2	22.0	-	GO	WITH	-	-	A
88.2	22.0	-	ESCORT	-	GO	BACK	P

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	22.0	-	START	-	-	-	T
22.1	22.0	-	CONTINUE	-	-	-	T
23.1	22.0	-	START	-	-	-	T
24.1	22.0	START	WALK	TOWARDS	-	-	M
25.1	22.0	-	ESCORT	-	-	-	P
26.1	22.0	-	ESCORT	-	-	-	P
27.1	22.0	-	GO	TO	-	-	A
28.1	22.0	DECIDE	ESCAPE	FROM	-	-	P
30.1	22.0	-	GO	-	-	-	A
31.1	22.0	-	START	-	-	-	T
32.1	22.0	START	GO	-	-	-	A
33.1	22.0	-	GO	-	START GO	TO	A
34.1	22.0	-	ESCORT	-	-	-	P
35.1	22.0	-	SET	OFF	-	-	T
36.1	22.0	-	GO	-	-	-	A
37.1	22.0	-	ESCORT	-	-	-	P
38.1	22.0	-	ESCORT	-	GO	TOGETHER	P
39.1	22.0	-	GO	ONE BY ONE	-	-	A
40.1	22.0	-	ESCORT	-	START GO	TO	P
41.1	22.0	START	GO	-	-	-	A
42.1	22.0	-	START	-	-	-	T
43.1	22.0	-	START	-	-	-	T
45.1	22.0	-	GO	BACK TO	-	-	A
46.1	22.0	START	GO	-	-	-	A
47.1	22.0	-	GO	-	-	-	A
48.1	22.0	-	GO	TO	-	-	A
49.1	22.0	-	START	-	-	-	T
50.1	22.0	-	LEAVE	-	GO	TO	P
51.1	22.0	START	GO	TO	-	-	A
61.1	22.0	DECIDE	GO	TO	-	-	A
62.1	22.0	-	ESCORT	-	-	-	P
63.1	22.0	HAVE TO	GO	BACK TO	-	-	A
64.1	22.0	-	LEAVE	FOR	-	-	P
65.1	22.0	DECIDE	GET	TO TOGETHE	-	-	A
66.1	22.0	-	ESCORT	-	ACCOMPANY	-	P
67.1	22.0	HAVE TO	GO	TO	-	-	A
68.1	22.0	-	ESCORT	-	-	-	P
69.1	22.0	-	LEAVE	-	HURRY	TO	P
70.1	22.0	-	LEAVE	FOR	-	-	P
71.1	22.0	-	LEAVE	WITH	-	-	P
72.1	22.0	-	SET	OFF TO	-	-	T
73.1	22.0	-	ESCORT	-	-	-	P
74.1	22.0	HAVE TO	GO	-	START GO	BACK	A
75.1	22.0	START	GO	TOGETHER	-	-	A
81.1	22.0	DECIDE	GO	BACK TO	-	-	A
82.1	22.0	DECIDE	GO	TOGETHER T	-	-	A
83.1	22.0	START	GO	TOGETHER T	-	-	A
84.1	22.0	ARRANGE	GO	TO	-	-	A
85.1	22.0	-	LEAVE	-	-	-	P
86.1	22.0	-	ESCORT	-	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	22.0	-	CONTINUE	-	-	-	T
22.2	22.0	-	RUN	TO	-	-	M
24.2	22.0	-	START	-	-	-	T
25.2	22.0	-	ESCORT	TO	-	-	P
26.2	22.0	-	ESCORT	-	-	-	P
27.2	22.0	-	WALK	HURRIEDLY	-	-	M
28.2	22.0	DECIDE	WALK	AGAIN	-	-	M
29.2	22.0	START	GO	-	-	-	A
30.2	22.0	DECIDE	GO	TO	-	-	A
31.2	22.0	-	CONTINUE	-	-	-	T
33.2	22.0	-	ESCORT	-	GO	TO	P
34.2	22.0	-	TAKE	-	ESCORT	-	X
35.2	22.0	-	SET	OFF	-	-	T
36.2	22.0	-	START	-	-	-	T
37.2	22.0	-	GO	TO	-	-	A
38.2	22.0	-	ESCORT	-	-	-	P
39.2	22.0	-	CONTINUE	-	-	-	T
40.2	22.0	START	GO	TO	-	-	A
41.2	22.0	-	GO	WITH	START GO	-	A
42.2	22.0	-	START	-	-	-	T
43.2	22.0	START	GO	TO	-	-	A
44.2	22.0	-	WALK	WITH	-	-	M
45.2	22.0	DECIDE	GO	BACK TO	-	-	A
46.2	22.0	HAVE TO	GO	-	-	-	A
47.2	22.0	-	GO	-	RUN	-	A
48.2	22.0	START	GO	-	-	-	A
49.2	22.0	-	ESCORT	-	-	-	P
50.2	22.0	-	LEAVE	TO	-	-	P
51.2	22.0	HAVE TO	START	-	-	-	T
61.2	22.0	-	WALK	WITH	-	-	M
63.2	22.0	DECIDE	GO	TO	RUN	TO	A
65.2	22.0	DECIDE	GET	TO..TOGETH	-	-	A
66.2	22.0	-	CONTINUE	-	-	-	T
67.2	22.0	-	GO	TO	-	-	A
68.2	22.0	DECIDE	GO	-	WALK	TOGETHER	A
69.2	22.0	-	LEAVE	TO	ESCORT	-	P
70.2	22.0	-	LEAVE	WITH...TO	-	-	P
71.2	22.0	TELL	ESCORT	TO	-	-	P
72.2	22.0	DECIDE	GO	TOGETHER W	-	-	A
73.2	22.0	DECIDE	GO	TO	-	-	A
74.2	22.0	START	GO	BACK TO	-	-	A
75.2	22.0	START	GO	-	ACCOMPANY	-	A
78.2	22.0	START	GO	TO	-	-	A
79.2	22.0	-	WALK	BACK TO	-	-	M
81.2	22.0	-	LEAVE	-	GO	TO	P
82.2	22.0	-	WALK	TOGETH TOW	-	-	M
83.2	22.0	-	ACCOMPANY	TO	-	-	P

(23) ...they SNEAKED ROUND the back of of the headmaster's house

N A T I V E S P E A K E R S

MT	101	23.sneaked round back
	102	23.sneaked round back
	103	23.sneaked round back
	104	23.sneaked round back
	105	23.sneaked past
	106	23.sneaked round
	107	23.ran to house
	108	23.walking round corner...hid behind
	109	23.sneaked past
MT	201	23.crept round back of
	202	23.sneaked past
	203	23.passed
	204	23.hid..going past
	205	23.ran beside
	206	23.sneaked past
	207	23.went round back
	208	23.rushed round corner
	209	23.sneaking by
	210	23.went past
	211	23.hid behind...sneaked along to
	212	23.sneaked round the back of
	213	23.-
	214	23.(up through the path)
	215	23.ran behind
	216	23.crept past
	217	23.had to duck down
	218	23.sneaked round
	219	23.went round the back
	220	23.had to sneak past
	221	23.went the back way past house
	222	23.?
	223	23.ran up beside back of
	224	23.sneaked round the back of

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	23.0	-	PASS	BESIDE	-	-	P
33.1	23.0	-	PASS	NEAR BY	-	-	P
35.1	23.0	TRY	EXPECT?	-	-	-	X
36.1	23.0	-	FOLLOW	AT BACK OF	-	-	P
37.1	23.0	-	REACH	BEHIND	PASS	THROUGH	P
38.1	23.0	-	REACH	NEAR	WALK	ON KNEES	P
39.1	23.0	-	HIDE	BEHIND	-	-	X
40.1	23.0	-	GO	-	HIDE	-	A
41.1	23.0	-	PASS	BESIDE	-	-	P
42.1	23.0	-	PASS	AT BACK OF	-	-	P
46.1	23.0	-	GO	PASTBEHIND	-	-	A
48.1	23.0	DECIDE	PASS	BEHIND	WALK	-	P
50.1	23.0	-	DRAG	-	-	-	M
52.1	23.0	-	FOLLOW	ROUTE BEHI	-	-	P
53.1	23.0	-	PASS	BEHIND	-	-	P
54.1	23.0	-	PASS	NEAR	TRY..HIDE	-	P
57.1	23.0	-	PASS	-	-	-	P
58.1	23.0	-	PASS	-	-	-	P
61.1	23.0	-	GO	-	CRAWL	SLOWLY	A
62.1	23.0	DECIDE	TAKE	-	-	-	P
63.1	23.0	-	PASS	NEAR	-	-	P
64.1	23.0	-	FOLLOW	-	-	-	P
66.1	23.0	-	GO	THROUGHBEH	-	-	A
67.1	23.0	-	GO	THROUGHRND	-	-	A
69.1	23.0	-	GO	BEHIND	-	-	A
70.1	23.0	-	PASS	BEHIND	-	-	P
71.1	23.0	-	HIDE	BEHIND	-	-	X
72.1	23.0	-	FOLLOW	-	-	-	P
73.1	23.0	-	PASS	BESIDE	-	-	P
74.1	23.0	-	FOLLOW	BEHIND	-	-	P
75.1	23.0	-	TAKE	-	-	-	P
76.1	23.0	-	LIMP	THROUGH	-	-	M
77.1	23.0	-	REACH	-	-	-	P
78.1	23.0	-	TAKE	-	-	-	P
79.1	23.0	-	PASS	BESIDE	-	-	P
80.1	23.0	-	HIDE	BEHIND	-	-	M
81.1	23.0	-	PASS	PAST	-	-	P
82.1	23.0	-	GO	BEHIND	MOVE	SLOWLY	A
83.1	23.0	-	GO	THROUGH	WALK	SNEAKILY	A
84.1	23.0	-	FOLLOW	BEHIND	-	-	P
85.1	23.0	-	SNEAK	BEHIND	WALK	STEALTHILY	M
86.1	23.0	DECIDE	SNEAK	-	PASS	BEHIND	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	23.0	-	PASS	BEHIND	-	-	P
33.2	23.0	-	PASS	BEHIND	-	-	P
35.2	23.0	-	REACH	AT	SLIP?	-	P
36.2	23.0	-	GO	TOWARDS	-	-	A
37.2	23.0	START	WALK	BEHIND TOW	-	-	M
38.2	23.0	-	REACH	NEAR	SNEAK	BEHIND	P
39.2	23.0	-	CREEP	BEHIND	-	-	M
40.2	23.0	-	HIDE	BEHIND	-	-	X
41.2	23.0	-	PASS	-	-	-	P
42.2	23.0	-	PASS	-	-	-	P
46.2	23.0	-	PEEP	BEHIND	-	-	X
47.2	23.0	-	PASS	BEHIND	-	-	P
48.2	23.0	-	PASS	BEHIND	-	-	P
50.2	23.0	-	PASS	-	SNEAK	THROUGH	P
51.2	23.0	-	SNEAK	ROUND	-	-	M
52.2	23.0	-	WALK	PAST	-	-	M
53.2	23.0	-	SNEAK	BEHIND	-	-	M
54.2	23.0	-	WALK	BEHIND	SNEAK	BEHIND	M
55.2	23.0	-	SNEAK	BEHIND	-	-	M
61.2	23.0	-	GO	ROUND	CRAWL	DOWN	A
62.2	23.0	DECIDE	FOLLOW	-	-	-	P
63.2	23.0	-	PASS	BY	-	-	P
64.2	23.0	-	PASS	NEAR	-	-	P
65.2	23.0	-	PASS	BY	SNEAK	SLOWLY	P
66.2	23.0	-	MOVE	BEHIND	-	-	A
67.2	23.0	DECIDE	MAKE WAY	ROUND	-	-	X
68.2	23.0	-	COME	IN	-	-	P
69.2	23.0	-	?	-	-	-	?
71.2	23.0	-	FOLLOW	BEHIND	-	-	P
74.2	23.0	-	PASS	BEHIND	-	-	P
75.2	23.0	-	TAKE	-	SNEAK	INTO	P
76.2	23.0	-	GO	PAST	-	-	A
77.2	23.0	-	RUN	PAST	-	-	M
78.2	23.0	-	TAKE	-	-	-	P
79.2	23.0	-	PASS	NEAR	-	-	P
80.2	23.0	-	SLIP	-	HIDE	BY	M
81.2	23.0	-	TRAVEL	UP TO	-	-	A
82.2	23.0	START	CREEP?	BEHIND	-	-	M
84.2	23.0	TRY	RUN	-	FOLLOW	-	M

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	23.0	TRY	PASS	-	-	-	P
22.1	23.0	-	GO	THROUGH	GO	SLOW	A
23.1	23.0	-	PASS	NEAR	-	-	P
25.1	23.0	-	PASS	-	-	-	P
26.1	23.0	-	PASS	-	-	-	P
28.1	23.0	-	PASS	-	-	-	P
29.1	23.0	-	PASS	ACROSS	-	-	P
30.1	23.0	-	REACH	AT	-	-	P
32.1	23.0	-	MOVE	SLOWLY	-	-	A
33.1	23.0	START	HIDE	-	-	-	M
35.1	23.0	-	PASS	-	-	-	P
36.1	23.0	-	PASS	THROUGH	GO	SLOWLY	P
37.1	23.0	-	REACH	-	-	-	P
38.1	23.0	WANT	HIDE	-	PASS	-	M
39.1	23.0	-	PASS	-	-	-	P
41.1	23.0	-	PASS	BEHIND	HIDE	-	P
42.1	23.0	PRETEND	HIDE	-	-	-	X
43.1	23.0	-	PASS	-	-	-	P
45.1	23.0	TRY	HIDE	-	-	-	M

61.1	23.0	-	PASS	BY	-	-	P
63.1	23.0	-	PASS	THROUGH	-	NEAR	P
64.1	23.0	-	HIDE	BEHIND	-	-	M
65.1	23.0	-	RUN	-	HIDE	BEHIND	M
66.1	23.0	-	REACH	-	-	-	P
67.1	23.0	-	PASS	BY	-	-	P
68.1	23.0	-	WALK	SILENTLY	-	-	M
69.1	23.0	-	CROUCH	DOWN	WALK	BEHIND	M
71.1	23.0	DECIDE	HIDE	BEHIND	-	-	M
72.1	23.0	-	GO	-	HIDE	-	A
73.1	23.0	-	GO	PAST	-	-	A
74.1	23.0	HAVE TO	PASS	NEAR	CROUCH	-	P
76.1	23.0	-	RUN	-	-	-	M
77.1	23.0	HAVE TO	HIDE	-	-	-	M
78.1	23.0	TRY	GET	AWAY	-	-	A
79.1	23.0	-	RUN	TO	PASS	THROUGH	M
81.1	23.0	-	PASS	BY	HIDE	-	P
82.1	23.0	-	PASS	NEAR	HIDE	-	P
83.1	23.0	HAVE TO	CREEP	PAST	-	-	M
84.1	23.0	-	PASS	THROUGH	-	-	P
85.1	23.0	-	PASS	THROUGH	-	-	P
86.1	23.0	-	PASS	-	-	-	P
87.1	23.0	-	HIDE	-	-	-	M

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	23.0	-	PASS	-	RUN	-	P
22.2	23.0	-	REACH	NEAR	GO	SLOWLY	P
23.2	23.0	-	PASS	NEAR	-	-	P
24.2	23.0	-	PASS	OVER	-	-	P
25.2	23.0	-	PASS	THROUGH	-	-	P
27.2	23.0	-	PASS	THROUGH	-	-	P
28.2	23.0	-	PASS	THROUGH	-	-	P
29.2	23.0	-	SNEAK	ALONG	-	-	M
30.2	23.0	-	PASS	-	-	-	P
31.2	23.0	-	GO	THROUGH	-	-	A
32.2	23.0	HAVE TO	PASS	FAR AWAY	-	-	P
33.2	23.0	-	SNEAK	BESIDE	-	-	M
34.2	23.0	-	COME	INTO	HIDE	-	P
35.2	23.0	-	GO	THROUGH	-	-	A
37.2	23.0	-	SEE	-	CROSS	-	X
38.2	23.0	TRY	PASS	SLOWLY	-	-	P
39.2	23.0	-	PASS	AT	-	-	P
40.2	23.0	-	COME	ACROSS	HIDE	-	P
41.2	23.0	-	REACH	-	-	-	P
42.2	23.0	-	HIDE	-	-	-	M
43.2	23.0	-	REACH	-	HIDE	-	P
44.2	23.0	-	?	-	-	-	?
45.2	23.0	-	HIDE	ASIDE	-	-	M
46.2	23.0	-	REACH	-	-	-	P

61.2	23.0	-	GO	BEHIND	-	-	A
62.2	23.0	-	PASS	BEHIND	-	-	P
63.2	23.0	-	REACH	-	GO	BEHIND	P
64.2	23.0	-	PASS	-	HIDE	BEHIND	P
65.2	23.0	-	COME	TO	TIPTOE	-	P
66.2	23.0	DECIDE	GO	-	HIDE	-	A
68.2	23.0	-	REACH	OUTSIDE	GO	SILENTLY	P
69.2	23.0	-	PASS	BESIDE	-	-	P
71.2	23.0	-	HIDE	BEHIND	-	-	M
72.2	23.0	-	GO	OPPOSITE	-	-	A
73.2	23.0	-	SCRAPE	PAST	-	-	M
76.2	23.0	-	SLIP	THROUGH	-	-	M
77.2	23.0	-	SNEAK	INTO	-	BEHIND	M
78.2	23.0	HAVE TO	PASS	THROUGH	-	-	P
79.2	23.0	-	PASS	THROUGH	-	-	P
80.2	23.0	-	COME	TO	-	-	P
81.2	23.0	-	PASS	-	-	-	P
82.2	23.0	-	CRAWL	BEHIND	-	-	M
83.2	23.0	HAVE TO	CREEP	PAST	-	-	M
84.2	23.0	-	PASS	-	SNEAK	THROUGH	P
85.2	23.0	-	MARCH?	THROUGH	-	BEHIND	M
86.2	23.0	-	?	-	-	-	?
87.2	23.0	-	CRAWL	-	PASS	-	M
88.2	23.0	-	REACH	-	CROUCH	BEHIND	P

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	23.0	-	GO	THROUGH	TRESPASS	TO	A
22.1	23.0	-	HIDE	-	-	-	X
23.1	23.0	-	GO	ROUND BEHI	-	-	A
24.1	23.0	-	PASS	NEAR	-	-	P
25.1	23.0	-	PASS	BEHIND	-	-	P
26.1	23.0	-	FOLLOW	BEHIND	-	-	P
27.1	23.0	-	HIDE	AT	-	-	X
31.1	23.0	-	FOLLOW	-	-	-	P
32.1	23.0	DECIDE	GO	BEHIND	-	-	A
33.1	23.0	-	FOLLOW	BEHIND	-	-	P
34.1	23.0	-	COME	TO	-	-	P
35.1	23.0	DECIDE	ESCAPE	IN?	-	-	P
36.1	23.0	-	GO	-	-	-	A
37.1	23.0	-	GO	TO	-	-	A
38.1	23.0	-	PASS	THROUGH	-	-	P
39.1	23.0	DECIDE	FOLLOW	IN	-	-	P
40.1	23.0	START	FOLLOW	-	-	-	P
41.1	23.0	-	FOLLOW	BEHIND	-	-	P
42.1	23.0	DECIDE	FOLLOW	BEHIND	-	-	P
45.1	23.0	DECIDE	GO	BEHIND	-	-	A
48.1	23.0	-	PASS	IN	-	-	P
49.1	23.0	-	PASS	BEHIND	-	-	P
50.1	23.0	-	PASS	BEHIND	-	-	P
51.1	23.0	HAVE TO	CRAWL?	BEHIND	-	-	M
61.1	23.0	DECIDE	FOLLOW	-	-	-	P
62.1	23.0	-	FOLLOW	BEHIND	-	-	P
63.1	23.0	DECIDE	PASS	BEHIND	-	-	P
65.1	23.0	DECIDE	SNEAK	BY	-	-	M
66.1	23.0	-	GET WAY	BEHIND	-	-	A
67.1	23.0	-	TIPTOE	BEHIND	-	-	M
69.1	23.0	-	PASS	BEHIND	-	-	P
70.1	23.0	-	SNEAK	THROUGH	-	-	M
71.1	23.0	DECIDE	FOLLOW	BEHIND	-	-	P
72.1	23.0	HAVE TO	PASS	BEHIND	-	-	P
73.1	23.0	TRY	HIDE	BEHIND	GO	TO	X
74.1	23.0	HAVE TO	GO	ROUND BEHI	-	-	A
75.1	23.0	-	PASS	BEHIND	-	-	P
81.1	23.0	DECIDE	PASS	BEHIND	-	-	P
82.1	23.0	DECIDE	FOLLOW	BEHIND	-	-	P
83.1	23.0	-	SKIP	THRO'BEHIN	-	-	M
84.1	23.0	DECIDE	PASS	BEHIND	-	-	P
85.1	23.0	-	FOLLOW	BEHIND	-	-	P

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	23.0	-	COME	-	FIND	WAY TO	P
25.2	23.0	-	SNEAK	BEHIND	-	-	M
26.2	23.0	-	SNEAK	TO	-	-	M
27.2	23.0	-	HIDE	BEHIND	-	-	X
28.2	23.0	DECIDE	ESCAPE	FROM	-	-	P
29.2	23.0	-	RUN	-	HIDE	-	M
30.2	23.0	-	SNEAK	TO	-	-	M
33.2	23.0	-	PASS	OVER	-	-	P
34.2	23.0	-	GO	BEHIND	-	-	A
35.2	23.0	-	REACH	NEAR	TAKE	-	P
36.2	23.0	-	FOLLOW	THROUGH	-	-	P
37.2	23.0	-	PASS	THROUGH	-	-	P
38.2	23.0	TRY	PASS	-	-	-	P
39.2	23.0	-	FOLLOW	-	-	-	P
40.2	23.0	-	FOLLOW	BEHIND	-	-	P
41.2	23.0	-	FOLLOW	BEHIND	-	-	P
42.2	23.0	-	SNEAK	BEHIND	-	-	M
44.2	23.0	-	REACH	-	HIDE	-	P
45.2	23.0	-	GO	BEHIND	-	-	A
46.2	23.0	-	SNEAK	OVER	-	-	M
48.2	23.0	-	FOLLOW	NEAR	-	-	P
49.2	23.0	-	FALL	BEHIND	-	-	P
50.2	23.0	-	FOLLOW	BEHIND	-	-	P
51.2	23.0	HAVE TO	PASS	AT	-	-	P
61.2	23.0	-	PASS	OVER	-	-	P
63.2	23.0	DECIDE	PASS	BEHIND	-	-	P
65.2	23.0	DECIDE	SNEAK	BY	-	-	M
66.2	23.0	-	SLIP	BEHIND	-	-	M
67.2	23.0	-	TIPTOE	BEHIND	-	-	M
68.2	23.0	DECIDE	GO	BEHIND	-	-	A
69.2	23.0	-	GO	ROUND THRO	-	-	A
70.2	23.0	-	TAKE	-	-	-	P
71.2	23.0	-	SNEAK	THROUGH	-	-	M
72.2	23.0	-	PASS	BEHIND	-	-	P
73.2	23.0	-	PASS	ALONG	-	-	P
74.2	23.0	-	REACH	-	HAVETOHIDE	BEHIND	P
75.2	23.0	-	PASS	BEHIND	-	-	P
78.2	23.0	-	REACH	BEHIND	-	-	P
81.2	23.0	-	SNEAK	BEHIND	-	-	M
82.2	23.0	HAVE TO	FOLLOW	BEHIND	-	-	P
83.2	23.0	-	SNEAK	THROUGH	-	-	M
84.2	23.0	-	RUSH	BEHIND	-	-	M
87.2	23.0	DECIDE	WALK	ROUND	-	-	M

(24) Then they RACED to the school gate...

N A T I V E S P E A K E R S

MT	101	24.came to school gate
	102	24.raced up to gate
	103	24.belted up path
	104	24.ran up to school
	105	24.came to school
	106	24.?
	107	24.got to school
	108	24.went to school
	109	24.got to
MT	201	24.reached gate
	202	24.ran to
	203	24.?
	204	24.got to
	205	24.got to
	206	24.walked to school
	207	24.got to high school
	208	24.ran right into the school
	209	24.-
	210	24.running into school
	211	24.-
	212	24.ran to school gate
	213	24.reached school
	214	24.saw the school
	215	24.(saw notice)
	216	24.ran to the gate
	217	24.ran to school
	218	24.(surprised to see notice)
	219	24.got to the school gates
	220	24.got to school
	221	24.walked up path...came to sch
	222	24.came to school gate
	223	24.got to school
	224	24.got to school

LUO SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.1	24.0	-	RUN	-	FIND	AT	M
33.1	24.0	-	COME	TO	-	-	P
34.1	24.0	START	RUN	-	-	-	M
35.1	24.0	-	REACH	AT	-	-	P
36.1	24.0	-	RUN	THROUGH	-	-	M
37.1	24.0	START	RUN	-	-	-	M
38.1	24.0	-	REACH	-	-	-	P
39.1	24.0	-	GO	-	RUN	-	A
40.1	24.0	START	RUN	TO	-	-	M
41.1	24.0	-	COME	TO	-	-	P
42.1	24.0	-	REACH	-	-	-	P
46.1	24.0	-	GO	TO	-	-	A
48.1	24.0	START	RUN	-	-	-	M
50.1	24.0	-	REACH	-	-	-	P
51.1	24.0	-	WALK	HURRIEDLY	-	-	M
52.1	24.0	-	GO	ROUND TOWA	-	-	A
53.1	24.0	-	RUN	-	REACH	-	M
54.1	24.0	-	RUN	-	GO	TOWARDS	M
55.1	24.0	-	RUN	VERY FAST	-	-	M
56.1	24.0	-	RUN	-	-	-	M
57.1	24.0	-	RUN	INTO	-	-	M
58.1	24.0	-	RUN	TO	-	-	M
61.1	24.0	DECIDE	RUN	TOWARDS	-	-	M
62.1	24.0	-	RUN	-	-	-	M
63.1	24.0	-	GET	THROUGH	-	-	A
64.1	24.0	-	REACH	-	-	-	P
66.1	24.0	-	RUN	TOWARDS	-	-	M
67.1	24.0	START	RUN	TOWARDS	-	-	M
68.1	24.0	-	RUN	-	-	-	M
70.1	24.0	-	REACH	-	-	-	P
71.1	24.0	-	GO	THROUGH	-	-	A
72.1	24.0	-	FOLLOW	-	-	-	P
73.1	24.0	-	GO	-	RUN	-	A
74.1	24.0	-	RUN	TOWARDS	-	-	M
75.1	24.0	-	RUN	-	-	-	M
76.1	24.0	-	WALK	-	-	-	M
77.1	24.0	-	REACH	-	-	-	P
78.1	24.0	-	RUN	TO	-	-	M
79.1	24.0	-	?	-	-	-	?
80.1	24.0	-	RUN	TOWARDS	-	-	M
81.1	24.0	-	REACH	-	-	-	P
82.1	24.0	START	RUN	-	-	-	M
83.1	24.0	-	RUN	STR'T AWTO	-	-	M
84.1	24.0	TRY	RUN	-	-	-	M
85.1	24.0	HAVE TO	RUN	-	-	-	M
86.1	24.0	START	RUN	TOWARDS	-	-	M

LUO SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
32.2	24.0	GO	RUN	-	REACH	AT	P
33.2	24.0	-	REACH	TO	-	-	P
34.2	24.0	START	RUN	-	-	-	M
35.2	24.0	-	REACH	-	-	-	P
36.2	24.0	-	RUN	TO	-	-	M
37.2	24.0	-	REACH	-	-	-	P
38.2	24.0	-	RUN	TO	-	-	M
39.2	24.0	-	GO	-	RUN	TOWARDS	A
41.2	24.0	-	REACH	-	-	-	P
42.2	24.0	-	REACH	-	-	-	P
46.2	24.0	-	REACH	-	-	-	P
47.2	24.0	-	RUN	TOWARDS	-	-	M
48.2	24.0	-	GO	HAPPILY	-	-	A
49.2	24.0	-	REACH	TO	-	-	P
50.2	24.0	-	RUN	ALONG	-	-	M
51.2	24.0	-	RACE	TOWARDS	-	-	M
52.2	24.0	-	FOLLOW	...TOWARDS	-	-	P
53.2	24.0	-	RUN	TOWARDS	-	-	M
54.2	24.0	-	FOLLOW	-	-	-	P
55.2	24.0	-	?	-	-	-	?
56.2	24.0	-	RUN	-	-	-	M
57.2	24.0	-	COME	TO	-	-	P
58.2	24.0	-	REACH	-	SNEAK	IN	P
61.2	24.0	START	RUN	FASTTOWARD	-	-	M
62.2	24.0	DECIDE	RUN	-	GO	TO	M
63.2	24.0	-	RUN	-	SEE	-	M
64.2	24.0	-	NEAR	-	-	-	P
65.2	24.0	-	WALK	TO	-	-	M
67.2	24.0	START	RUN	TO	-	-	M
68.2	24.0	-	REACH	-	-	-	P
69.2	24.0	-	REACH	-	-	-	P
71.2	24.0	-	REACH	-	-	-	P
72.2	24.0	-	REACH	-	-	-	P
73.2	24.0	-	TAKE TO..	HEELS	-	-	?
74.2	24.0	-	REACH	-	-	-	P
75.2	24.0	-	RUN	TOWARDS	-	-	M
76.2	24.0	-	REACH	-	-	-	P
77.2	24.0	-	REACH	-	-	-	P
78.2	24.0	-	COME	TO	RUN	THROUGH TO	P
79.2	24.0	-	GO	-	-	-	A
80.2	24.0	-	RUN	TOWARDS	-	-	M
81.2	24.0	-	REACH	-	-	-	P
82.2	24.0	-	GO	-	WALK	SLOWLY	A
84.2	24.0	-	REACH	-	-	-	P

NANDI SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	24.0	-	REACH	-	-	-	P
22.1	24.0	START	RUN	-	-	-	M
23.1	24.0	TRY	RUN	-	-	-	M
24.1	24.0	-	REACH	ON	-	-	P
25.1	24.0	-	RUN	-	-	-	M
26.1	24.0	-	REACH	-	-	-	P
28.1	24.0	-	REACH	-	-	-	P
29.1	24.0	-	RUN	-	-	-	M
30.1	24.0	-	RUN	TO	-	-	M
31.1	24.0	-	GO	-	FIND	-	A
32.1	24.0	HAVE TO	RUN	-	-	-	M
33.1	24.0	-	RUN	-	-	-	M
34.1	24.0	-	RUN	-	PASS	-	M
35.1	24.0	-	REACH	TO	-	-	P
36.1	24.0	-	RUN	-	-	-	M
37.1	24.0	DECIDE	RUN	-	-	-	M
38.1	24.0	-	RUN	TOWARDS	-	-	M
39.1	24.0	-	RUN	AWAY	-	-	M
41.1	24.0	-	RUN	-	-	-	M
42.1	24.0	-	GO	TO	-	-	A
43.1	24.0	-	RUN	QUICKLY TO	-	-	M
44.1	24.0	-	RUN	VERY FAST	-	-	M
45.1	24.0	-	RUN	-	GO	TO	M
46.1	24.0	-	REACH	-	-	-	P
61.1	24.0	-	GO	THROUGH	-	-	A
62.1	24.0	-	REACH	-	-	-	P
63.1	24.0	-	RUN	TO	-	-	M
64.1	24.0	START	RUN	-	-	-	M
65.1	24.0	-	RUN	TOWARDS	-	-	M
66.1	24.0	-	REACH	-	-	-	P
67.1	24.0	START	RUN	-	-	-	M
68.1	24.0	-	RUN	-	-	-	M
69.1	24.0	-	COME	ACROSS	-	-	P
71.1	24.0	-	RUN	TO	-	-	M
72.1	24.0	-	RUN	UP TO	-	-	M
73.1	24.0	-	RUN	INTO	-	-	M
74.1	24.0	-	REACH	-	-	-	P
75.1	24.0	-	MEET	-	-	-	X
76.1	24.0	-	REACH	-	-	-	P
77.1	24.0	-	REACH	-	-	-	P
78.1	24.0	-	REACH	-	-	-	P
79.1	24.0	-	REACH	-	-	-	P
81.1	24.0	-	GO	-	-	-	A
82.1	24.0	-	RUN	TO	-	-	M
83.1	24.0	-	RUN	-	-	-	M
84.1	24.0	-	REACH	-	-	-	P
85.1	24.0	-	RUN	-	-	-	M
87.1	24.0	-	REACH	-	-	-	P
88.1	24.0	-	REACH	-	-	-	P

NANDI SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	24.0	-	ARRIVE	TO	-	-	P
22.2	24.0	-	REACH	NEAR	-	-	P
24.2	24.0	-	REACH	AT	-	-	P
25.2	24.0	-	RUN	-	-	-	M
27.2	24.0	-	REACH	-	-	-	P
28.2	24.0	-	REACH	-	-	-	P
29.2	24.0	-	RUN	-	-	-	M
30.2	24.0	-	RUN	TO	-	-	M
32.2	24.0	-	REACH	-	-	-	P
33.2	24.0	-	RUN	-	-	-	M
34.2	24.0	DECIDE	RUN	-	-	-	M
35.2	24.0	-	REACH	AT	-	-	P
37.2	24.0	-	SEE	-	RUN	-	X
38.2	24.0	-	REACH	-	-	-	P
39.2	24.0	-	RUN	AWAY	-	-	M
40.2	24.0	-	COME	TO	-	-	P
41.2	24.0	TRY	GO	BACK	-	-	A
43.2	24.0	-	REACH	AT	-	-	P
44.2	24.0	-	MOVE	TOWARDS	-	-	A
45.2	24.0	-	RUN	TO	-	-	M
46.2	24.0	-	REACH	-	-	-	P
61.2	24.0	-	PROCEED	TOWARDS	-	-	P
62.2	24.0	-	GO	TOWARDS	-	-	A
63.2	24.0	-	RACE	TO	-	-	M
64.2	24.0	-	RUSH	TOWARDS	-	-	M
65.2	24.0	-	RUN	-	-	-	M
66.2	24.0	-	CONTINUE	-	-	-	T
68.2	24.0	-	RUN	TOWARDS	-	-	M
69.2	24.0	-	WALK	SLOWLY	APPROACH	-	M
71.2	24.0	-	ENTER	-	RUN	INTO	P
72.2	24.0	-	RUN	-	-	-	M
73.2	24.0	-	RUN	-	-	-	M
76.2	24.0	-	APPROACH	-	-	-	P
77.2	24.0	-	REACH	-	-	-	P
78.2	24.0	-	?	-	-	-	?
79.2	24.0	-	REACH	-	-	-	P
80.2	24.0	-	REACH	-	-	-	P
81.2	24.0	-	REACH	-	-	-	P
82.2	24.0	-	REACH	-	-	-	P
83.2	24.0	-	PASS	THROUGH	-	-	P
84.2	24.0	-	RUN	TO	-	-	M
85.2	24.0	-	REACH	-	-	-	P
86.2	24.0	-	RACE	TO	-	-	M
87.2	24.0	-	GO	TO	REACH	-	A
88.2	24.0	-	SEE	-	-	-	X

LUNYORE SPEAKERS - 1ST RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.1	24.0	-	ENTER	-	-	-	P
22.1	24.0	-	RUN	QUICKLY	-	-	M
23.1	24.0	-	RUN	FAST	-	-	M
24.1	24.0	START	RUN	TOWARDS	-	-	M
25.1	24.0	-	FIND	-	-	-	P
26.1	24.0	START	COMPETE	TO	-	-	X
27.1	24.0	-	WALK	TO	-	-	M
28.1	24.0	DECIDE	COMPETE	EACH OTHER	-	-	X
31.1	24.0	-	REACH	-	-	-	P
32.1	24.0	-	RUN	TO	-	-	M
33.1	24.0	-	GO	-	REACH	-	A
34.1	24.0	-	RUN	TO	-	-	P
35.1	24.0	START	RUN	-	-	-	M
36.1	24.0	-	REACH	-	-	-	P
38.1	24.0	-	GO	TO	-	-	A
39.1	24.0	START	RUN	-	-	-	M
40.1	24.0	-	REACH	AT	-	-	P
41.1	24.0	START	RUN	-	-	-	M
42.1	24.0	-	RUN	TOWARDS	-	-	M
43.1	24.0	START	RUN	-	-	-	M
45.1	24.0	-	RUN	-	-	-	M
46.1	24.0	-	REACH	AT	-	-	P
47.1	24.0	-	REACH	AT	-	-	P
49.1	24.0	-	GO	ON	-	-	A
50.1	24.0	-	RUN	-	-	-	M
51.1	24.0	START	RUN	-	-	-	M
61.1	24.0	-	REACH	-	-	-	P
62.1	24.0	START	RUN	-	-	-	M
63.1	24.0	-	REACH	-	-	-	P
64.1	24.0	DECIDE	RUN	-	-	-	P
65.1	24.0	START	RUN	QUICKLY	-	-	M
66.1	24.0	-	REACH	-	-	-	P
67.1	24.0	-	REACH	AT	-	-	P
68.1	24.0	-	GO	TO	-	-	A
69.1	24.0	START	RUN	-	-	-	M
70.1	24.0	-	REACH	-	-	-	P
71.1	24.0	-	REACH	-	-	-	P
72.1	24.0	-	REACH	-	-	-	P
73.1	24.0	START	RUN	-	-	-	M
74.1	24.0	-	REACH	ON	-	-	P
75.1	24.0	-	GO	UP TO	-	-	A
81.1	24.0	HAVE COMPE	RUN	-	-	-	M
82.1	24.0	-	REACH	-	-	-	P
83.1	24.0	-	SKIP	TO	-	-	M
84.1	24.0	-	REACH	-	-	-	P
85.1	24.0	-	REACH	-	-	-	P

LUNYORE SPEAKERS - 2ND RETELLING

Subj	Fram	Verb I	Verb II	Particle I	Verb III	ParticleII	Type
21.2	24.0	-	GO	TO	-	-	A
22.2	24.0	-	REACH	-	-	-	P
25.2	24.0	-	WALK	-	MEET	-	M
26.2	24.0	START	RACE	-	-	-	M
27.2	24.0	-	RUN	-	-	-	M
28.2	24.0	-	REACH	-	-	-	P
29.2	24.0	-	REACH	AT	-	-	P
30.2	24.0	-	GO	TOWARDS	REACH	-	A
31.2	24.0	-	REACH	-	-	-	P
33.2	24.0	-	GO	TO	-	-	A
34.2	24.0	-	REACH	-	-	-	P
35.2	24.0	-	RUN	TO	-	-	M
36.2	24.0	-	REACH	-	-	-	P
37.2	24.0	-	ARRIVE	AT	-	-	P
38.2	24.0	-	GO	TO	-	-	A
39.2	24.0	START	RACE	EACH OTHER	-	-	M
40.2	24.0	-	REACH	-	-	-	P
41.2	24.0	-	GO	TO	-	-	A
42.2	24.0	START	RACE	TOWARDS	-	-	M
43.2	24.0	START	RUN	-	-	-	M
44.2	24.0	-	CONTINUE	UP TO	-	-	T
46.2	24.0	-	REACH	AT	-	-	P
47.2	24.0	-	REACH	AT	-	-	P
48.2	24.0	-	REACH	-	-	-	P
49.2	24.0	-	GO	ON	REACH	AT	A
50.2	24.0	-	REACH	-	-	-	P
51.2	24.0	-	GO	-	REACH	AT	A
61.2	24.0	-	REACH	AT	-	-	P
63.2	24.0	-	REACH	-	-	-	P
65.2	24.0	-	RUN	QUICKLY TO	-	-	M
66.2	24.0	-	REACH	-	-	-	P
67.2	24.0	-	REACH	AT	-	-	P
68.2	24.0	-	REACH	-	-	-	P
69.2	24.0	-	RUN	TO	-	-	M
70.2	24.0	-	REACH	-	-	-	P
71.2	24.0	-	REACH	-	-	-	P
72.2	24.0	-	REACH	TO	-	-	P
73.2	24.0	-	REACH	-	-	-	P
74.2	24.0	-	ARRIVE	TO	-	-	P
75.2	24.0	-	GO	-	REACH	-	A
78.2	24.0	START	RUN	-	-	-	M
79.2	24.0	DECIDE	RUN	AWAY PAST	-	-	M
81.2	24.0	-	RACE	TOWARDS	-	-	M
82.2	24.0	-	REACH	-	-	-	P
83.2	24.0	-	GO	TO	RUN	-	A
84.2	24.0	-	MARCH	-	-	-	M

APPENDIX F

TASK A: ANOVA and SCHEFFE Tables

Table 1: One-way analysis of variance for M/T 1st retelling percentages

SOURCE	DF	SS	MS	F	p
FACTOR	6	12156.9	2026.2	21.52	<0.001
ERROR	163	15348.9	94.2		
TOTAL	169	27505.8			

Table 2: One-way analysis of variance for M/T 2nd retelling percentages

SOURCE	DF	SS	MS	F	p
FACTOR	6	8675.2	1445.9	14.55	<0.001
ERROR	163	16199.7	99.4		
TOTAL	169	24874.9			

Table 3: One-way analysis of variance for P/T 1st retelling percentages

SOURCE	DF	SS	MS	F	p
FACTOR	6	13302	2217	20.76	<0.001
ERROR	163	17403	107		
TOTAL	169	30705			

Table 4: One-way analysis of variance for P/T 2nd retelling percentages

SOURCE	DF	SS	MS	F	p
FACTOR	6	10805	1801	13.82	<0.001
ERROR	163	21247	130		
TOTAL	169	32052			

Table 5: Scheffe test for M/T 1st retelling means

		YRS-1	YRT-1	NAS-1	NAT-1	DLS-1	DLT-1	MT
	Cell means	21.57	24.71	25.39	25.43	27.20	31.51	46.07
	Cell totals	510.78	585.13	601.24	602.18	644.10	746.16	1090.94
YRS-1	510.78	0.00	74.36	90.46	91.40	133.32	235.38	580.16*
YRT-1	585.13		0.00	6.10	17.05	58.96	161.02	505.80*
NAS-1	601.24			0.00	0.95	42.86	144.92	489.70*
NAT-1	602.18				0.00	41.91	143.97	488.76*
DLS-1	644.10					0.00	102.06	446.84*
DLT-1	746.16						0.00	344.78*
MT	1090.94							0.00

df = 163, n = 23.7, MSE = 94.20, k = 7, Fcrit = 2.16, p = 0.05, Fs = 12.96, tcrit = 240.56, *p = 0.05

Table 6: Scheffe test for M/T 2nd retelling means

		NAT-2	YRS-2	NAS-2	DLS-2	YRT-2	DLT-2	MT
	Cell means	26.64	26.64	26.72	30.06	33.07	33.62	46.07
	Cell totals	630.84	630.84	632.73	711.82	783.10	796.12	1090.94
NAT-2	630.84	0.00	0.00	1.89	80.99	152.26	165.29	460.10*
YRS-2	630.84		0.00	1.89	80.99	152.26	165.29	460.10*
NAS-2	632.73			0.00	79.09	150.37	163.39	458.21*
DLS-2	711.82				0.00	71.28	84.30	379.12*
YRT-2	783.10					0.00	13.02	307.84*
DLT-2	796.12						0.00	294.82*
MT	1090.94							0.00

df = 163, n = 23.7, MSE = 99.40, k = 7, Fcrit = 2.16, p = 0.05, Fs = 12.96, tcrit = 247.11, *p = 0.05

Table 7: Scheffe test for P/T 1st retelling means

		MT	DLT-1	YRT-1	NAT-1	NAS-1	DLS-1	YRS-1
	Cell means	39.66	56.66	60.36	60.56	62.00	62.53	64.71
	Cell totals	939.15	1341.71	1429.32	1434.06	1468.16	1480.71	1532.33
MT	939.15	0.00	402.56*	490.18*	494.91*	529.01*	541.56*	593.18*
DLT-1	1341.71		0.00	87.62	92.35	126.45	139.00	190.62
YRT-1	1429.32			0.00	4.74	38.84	51.39	103.01
NAT-1	1434.06				0.00	34.10	46.65	98.27
NAS-1	1468.16					0.00	12.55	64.17
DLS-1	1480.71						0.00	51.62
YRS-1	1532.33							0.00

df = 163, n = 23.7, MSE = 107.00, k = 7, Fcrit = 2.16, p = 0.05, Fs = 12.96, tcrit = 256.38, *p = 0.05

Table 8: Scheffe test for P/T 2nd retelling means

		MT	DLT-1	NAT-1	YRT-1	DLS-1	NAS-1	YRS-1
	Cell means	39.66	55.39	56.09	56.19	60.68	61.29	62.15
	Cell totals	939.15	1311.64	1328.21	1330.58	1436.90	1451.35	1471.71
MT	939.15	0.00	372.49*	389.06*	*391.43	*497.75	512.20*	532.56*
DLT-1	1311.64		0.00	16.58	18.94	125.27	139.71	160.08
NAT-1	1328.21			0.00	2.37	108.69	123.14	143.50
YRT-1	1330.58				0.00	106.32	120.77	141.13
DLS-1	1436.90					0.00	14.44	34.81
NAS-1	1451.35						0.00	20.36
YRS-1	1471.71							0.00

df = 163, n = 23.7, MSE = 130.00, k = 7, Fcrit = 2.16, p = 0.05, Fs = 12.96, tcrit = 282.59, *p = 0.05

Table 9: Analysis of variance for M/T percentages

Source	SS	df	MS	F	p
Between subjects	21332.47	136			
FIRSTLANG	1242.12	2	621.06	4.24	<0.05
EDUCATION	632.41	1	632.41	4.31	<0.05
FLANG*EDUC	250.50	2	125.25	0.85	n.s.
Error (between)	19207.44	131	146.62		
Within subjects	8938.36	137			
STORYLANG	770.92	1	770.92	13.07	<0.01
FLANG*STLANG	373.76	2	186.88	3.17	<0.05
EDUC*STLANG	7.91	1	7.91	0.19	n.s.
FLANG*EDUC*STLANG	59.41	2	29.71	0.60	n.s.
Error (within)	7726.36	131	58.98		

Table 10: Scheffe test on M/T language means

		NA	YR	DL
	Cell means	25.87	26.14	30.51
	Cell totals	2360.90	2385.54	2784.34
NA	2360.90	0.00	24.64	423.45*
YR	2385.54		0.00	398.81
DL	2784.34			0.00

df = 271, n = 91.3, MSE = 146.62, k = 3, Fcrit = 3.04, p = 0.05,
Fs = 6.08, tcrit = 403.46, *p = 0.05

Table 11: Analysis of variance for P/T percentages

Source	SS	df	MS	F	p
Between subjects	23339.85	136			
FIRSTLANG	248.13	2	124.06	0.76	n.s.
EDUCATION	1552.45	1	1552.45	9.45	<0.01
FLANG * EDUC	12.51	2	6.26	0.04	n.s.
Error (between)	21526.76	131	164.33		
Within subjects	11386.71	137			
STORYLANG	427.63	1	427.63	5.17	<0.05
FLANG * STLANG	33.27	2	16.63	0.20	n.s.
EDUC * STLANG	39.27	1	39.27	0.47	n.s.
FLANG*EDUC*STLANG	55.48	2	27.74	0.34	n.s.
Error (within)	10831.07	131	82.68		

Table 12: Analysis of variance for Path type I

Source	SS	df	MS	F	p
Between subjects	131989.97	136			
FIRSTLANG	9969.43	2	4984.71	5.49	<0.05
EDUCATION	2591.34	1	2591.34	2.85	n.s.
FLANG * EDUC	463.17	2	231.58	0.26	n.s.
Error (between)	118966.04	131	908.14		
Within subjects	43947.70	137			
STORYLANG	1245.63	1	1245.63	3.93	<0.05
FLANG * STLANG	561.67	2	280.84	0.89	n.s.
EDUC * STLANG	493.82	1	493.82	1.56	n.s.
FLANG*EDUC*STLANG	81.05	2	40.53	0.13	n.s.
Error (within)	41565.53	131	317.29		

Table 13: Analysis of variance for Path type II

Source	SS	df	MS	F	p
Between subjects	16477.37	136			
FIRSTLANG	452.88	2	226.44	1.89	n.s.
EDUCATION	237.34	1	237.34	1.98	n.s.
FLANG * EDUC	103.76	2	51.88	0.43	n.s.
Error (between)	15683.40	131	119.72		
Within subjects	7621.12	137			
STORYLANG	235.03	1	235.03	4.35	<0.05
FLANG * STLANG	146.13	2	73.06	1.35	n.s.
EDUC * STLANG	2.25	1	2.25	0.04	n.s.
FLANG*EDUC*STLANG	163.61	2	81.81	1.51	n.s.
Error (within)	7074.09	131	54.00		

Table 14: Analysis of variance for Path type III

Source	SS	df	MS	F	p
Between subjects	87566.00	136			
FIRSTLANG	29.77	2	14.88	0.02	n.s.
EDUCATION	3837.87	1	3837.87	6.20	<0.01
FLANG * EDUC	2556.47	2	1278.23	2.06	n.s.
Error (between)	81141.90	131	619.40		
Within subjects	71659.19	137			
STORYLANG	9684.23	1	9684.23	20.68	<0.001
FLANG * STLANG	587.76	2	293.88	0.63	n.s.
EDUC * STLANG	32.70	1	32.70	0.07	n.s.
FLANG*EDUC*STLANG	9.19	2	4.59	0.01	n.s.
Error (within)	61345.32	131	468.28		

Table 15: Analysis of variance for Path type IV

Source	SS	df	MS	F	p
Between subjects	48164.07	136			
FIRSTLANG	1572.40	2	786.20	2.25	n.s.
EDUCATION	1.36	1	1.36	0.00	n.s.
FLANG * EDUC	788.31	2	394.16	1.13	n.s.
Error (between)	45802.00	131	349.63		
Within subjects	28510.69	137			
STORYLANG	33.68	1	33.68	0.17	n.s.
FLANG * STLANG	2322.87	2	1161.43	5.84	<0.05
EDUC * STLANG	57.61	1	57.61	0.29	n.s.
FLANG*EDUC*STLANG	45.20	2	22.60	0.11	n.s.
Error (within)	26051.32	131	198.87		

Table 16: Analysis of variance for COME

Source	SS	df	MS	F	p
Between subjects	9700.3982	136			
FIRSTLANG	521.6338	2	260.8169	3.7480	<0.05
EDUCATION	2.6494	1	2.6494	0.0381	n.s.
FLANG*EDUC	60.1233	2	30.0616	0.4320	n.s.
Error (between)	9115.9917	131	69.5877		
Within subjects	3609.1500	137			
STORYLANG	331.9801	1	331.9801	13.9170	<0.001
SLANG*FLANG	85.0003	2	42.5001	1.7817	n.s.
SLANG*EDUC	0.6174	1	0.6174	0.0259	n.s.
SLANG*FLANG*EDUC	66.6432	2	33.3216	1.3969	n.s.
Error (within)	3124.9090	131	23.8543		

Table 17: Analysis of variance for GO

Source	SS	df	MS	F	p
Between subjects	20080.0793	136			
FIRSTLANG	1933.7061	2	966.8531	7.4406	<0.01
EDUCATION	743.0447	1	743.0447	5.7182	n.s.
FLANG*EDUC	380.7499	2	190.3750	1.4651	n.s.
Error (between)	17022.5786	131	129.9433		
Within subjects	6690.2950	137			
STORYLANG	548.0155	1	548.0155	11.8906	<0.001
SLANG*FLANG	58.6017	2	29.3009	0.6358	n.s.
SLANG*EDUC	28.1434	1	28.1434	0.6106	n.s.
SLANG*FLANG*EDUC	17.9886	2	8.9943	0.1952	n.s.
Error (within)	6037.5457	131	46.0881		

Table 18: Analysis of variance for PASS

Source	SS	df	MS	F	p
Between subjects	7780.9984	136			
FIRSTLANG	185.0555	2	92.5277	1.7793	n.s.
EDUCATION	684.6704	1	684.6704	13.1660	<0.001
FLANG*EDUC	98.9093	2	49.4546	0.9510	n.s.
Error (between)	6812.3632	131	52.0028		
Within subjects	3398.6650	137			
STORYLANG	176.1609	1	176.1609	7.6061	<0.01
SLANG*FLANG	51.9842	2	25.9921	1.1223	n.s.
SLANG*EDUC	20.9548	1	20.9548	0.9048	n.s.
SLANG*FLANG*EDUC	115.5589	2	57.7794	2.4948	n.s.
Error (within)	3034.0063	131	23.1604		

Table 19: Analysis of variance for REACH

Source	SS	df	MS	F	p
Between subjects	11381.0300	136			
FIRSTLANG	1595.9765	2	797.9882	10.7917	<0.01
EDUCATION	3.2495	1	3.2495	0.0439	n.s.
FLANG*EDUC	95.0619	2	47.5310	0.6428	n.s.
Error (between)	9686.7421	131	73.9446		
Within subjects	4229.5900	137			
STORYLANG	199.1568	1	199.1568	6.6850	<0.01
SLANG*FLANG	36.2204	2	18.1102	0.6079	n.s.
SLANG*EDUC	1.1160	1	1.1160	0.0375	n.s.
SLANG*FLANG*EDUC	90.3956	2	45.1978	1.5171	n.s.
Error (within)	3902.7011	131	29.7916		

Table 20: Analysis of variance for FOLLOW

Source	SS	df	MS	F	p
Between subjects	5381.4047	136			
FIRSTLANG	142.7274	2	71.3637	1.8955	n.s.
EDUCATION	105.4257	1	105.4257	2.8003	n.s.
FLANG*EDUC	201.3564	2	100.6782	2.6742	n.s.
Error (between)	4931.8952	131	37.6481		
Within subjects	1571.2150	137			
STORYLANG	35.4097	1	35.4097	3.0661	n.s.
SLANG*FLANG	7.6754	2	3.8377	0.3323	n.s.
SLANG*EDUC	0.0128	1	0.0128	0.0011	n.s.
SLANG*FLANG*EDUC	15.2247	2	7.6124	0.6591	n.s.
Error (within)	1512.8924	131	11.5488		

Table 21: Analysis of variance for RUN

Source	SS	df	MS	F	p
Between subjects	3824.2377	136			
FIRSTLANG	186.8436	2	93.4218	3.5265	<0.05
EDUCATION	54.4269	1	54.4269	2.0545	n.s.
FLANG*EDUC	112.6208	2	56.3104	2.1256	n.s.
Error (between)	3470.3465	131	26.4912		
Within subjects	1619.5250	137			
STORYLANG	90.9942	1	90.9942	8.1924	<0.01
SLANG*FLANG	55.7817	2	27.8908	2.5111	n.s.
SLANG*EDUC	0.1514	1	0.1514	0.0136	n.s.
SLANG*FLANG*EDUC	17.5650	2	8.7825	0.7907	n.s.
Error (within)	1455.0327	131	11.1071		

Table 22: Analysis of variance for WALK

Source	SS	df	MS	F	p
Between subjects	8270.5903	136			
FIRSTLANG	1154.2318	2	577.1159	10.6625	<0.01
EDUCATION	22.5610	1	22.5610	0.4168	n.s.
FLANG*EDUC	3.3155	2	1.6577	0.0306	n.s.
Error (between)	7090.4820	131	54.1258		
Within subjects	2874.1950	137			
STORYLANG	177.1244	1	177.1244	8.8725	<0.01
SLANG*FLANG	13.5355	2	6.7677	0.3390	n.s.
SLANG*EDUC	22.3518	1	22.3518	1.1196	n.s.
SLANG*FLANG*EDUC	46.0047	2	23.0024	1.1522	n.s.
Error (within)	2615.1787	131	19.9632□		

Table 23: Scheffe tests on selected verbs

(a) COME

		YR	NA	DL
	Cell means	4.61	5.07	7.73
	Cell totals	420.71	462.69	705.44
YR	420.71	0.00	41.98	284.73*
NA	462.69		0.00	242.75
DL	705.44			0.00

df = 271, n = 91.3, MSE = 69.59, k = 3, Fcrit = 3.04, p = 0.05,
Fs = 6.08, tcrit = 277.96, *p = 0.05

(b) GO

		DL	YR	NA
	Cell means	10.56	13.39	17.10
	Cell totals	963.71	1221.97	1560.55
DL	963.71	0.00	258.27	596.84*
YR	1221.97		0.00	338.57
NA	1560.55			0.00

df = 271, n = 91.3, MSE = 129.94, k = 3, Fcrit = 3.04, p = 0.05,
Fs = 6.08, tcrit = 379.82, *p = 0.05

(c) REACH

		DL	NA	YR
	Cell means	8.19	8.75	13.52
	Cell totals	747.42	798.52	1233.84
DL	747.42	0.00	51.11	486.42*
NA	798.52		0.00	435.31*
YR	1233.84			0.00

df = 271, n = 91.3, MSE = 73.94, k = 3, Fcrit = 3.04, p = 0.05,
Fs = 6.08, tcrit = 286.51, *p = 0.05

(d) RUN

		YR	NA	DL
	Cell means	3.45	4.85	5.39
	Cell totals	314.85	442.61	491.89
YR	314.85	0.00	127.76	177.04*
NA	442.61		0.00	49.28
DL	491.89			0.00

df = 271, n = 91.3, MSE = 26.49, k = 3, Fcrit = 3.04, p = 0.05,
Fs = 6.08, tcrit = 171.49, *p = 0.05

(e) WALK

		NA	YR	DL
	Cell means	3.89	6.29	8.95
	Cell totals	355.00	574.03	816.78
NA	355.00	0.00	219.02	461.78*
YR	574.03		0.00	242.75
DL	816.78			0.00

df = 271, n = 91.3, MSE = 54.13, k = 3, Fcrit = 3.04, p = 0.05,
Fs = 6.08, tcrit = 245.14, *p = 0.05

Table 24: Analysis of variance for Verb I percentages

Source	SS	df	MS	F	p
Between subjects	21235.69	136			
FIRSTLANG	1452.00	2	726.00	4.98	<0.05
EDUCATION	405.13	1	405.13	2.78	n.s
FLANG * EDUC	269.45	2	134.72	0.92	n.s.
Error (between)	19109.12	131	145.87		
Within subjects	9365.53	137			
STORYLANG	2169.49	1	2169.49	40.99	<0.001
FLANG * STLANG	82.19	2	41.09	0.78	n.s
EDUC * STLANG	35.29	1	35.29	0.67	n.s.
FLANG*EDUC*STLANG	145.17	2	72.58	1.37	n.s.
Error (within)	6933.39	131	52.93		

Table 25: Scheffe test on Verb I language group means

		NA	DL	YR
	Cell means	12.62	17.42	17.67
	Cell totals	1151.70	1589.75	1612.56
NA	1151.70	0.00	438.05*	460.86*
DL	1589.75		0.00	22.81
YR	1612.56			0.00

df = 271, n = 91.3, MSE = 145.87, k = 3, Fcrit = 3.04, p = 0.05,
Fs = 6.08, tcrit = 318.37, *p = 0.05

Table 26: Analysis of variance for Particle I percentages

SOURCE	SS	df	MS	F	p
Between subjects	31367.97	136			
FIRSTLANG	2554.17	2	1277.08	5.95	<0.05
EDUCATION	506.50	1	506.50	2.36	n.s.
FLANG * EDUC	176.36	2	88.18	0.41	n.s.
Error (between)	28130.94	131	214.74		
Within subjects	19097.97	137			
STORYLANG	4235.68	1	4235.68	38.16	<0.001
FLANG * STLANG	46.08	2	23.04	0.21	n.s.
EDUC * STLANG	12.25	1	12.25	0.11	n.s.
FLANG*EDUC*STLANG	261.79	2	130.90	1.18	n.s.
Error (within)	14542.18	131	111.01		

Table 27: Scheffe test on Particle I language group means

		NA	YR	DL
	Cell means	41.21	42.93	48.39
	Cell totals	3760.82	3917.79	4416.07
NA	3760.82	0.00	156.97	655.25*
YR	3917.79		0.00	498.28*
DL	4416.07			0.00

df = 271, n = 91.3, MSE = 214.74, k = 3, Fcrit = 3.04, p = 0.05,
Fs = 6.08, tcrit = 488.27, *p = 0.05

APPENDIX G

TASK B: VERB CHOICES

N.B. All verbs in the responses have been regularized to the base form

SENTENCE 1

Because of the heavy rain, the children were unable to _____ *over the stream to get to school.*

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
come	1	0	0	0	0	0	0
cross	9	19	12	17	18	10	39
get	0	0	0	0	0	1	6
go	1	1	1	2	2	0	8
jump	6	2	9	5	4	10	13
move	0	0	0	1	0	0	0
pass	6	2	5	0	3	1	0
run	0	0	1	0	1	0	0
walk	2	1	1	1	2	0	1
OTHER VERBS	0	0	0	0	0	1	1
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	0	0	0	0
*** Total ***	25	25	29	26	30	23	68

SENTENCE 3

It is dangerous to try to _____ from a moving vehicle.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
alight	8	0	4	7	8	7	0
come	1	0	0	0	0	0	0
cross	2	1	1	0	0	0	0
dash	0	0	0	0	1	0	0
enter	0	0	1	0	0	0	0
escape	1	0	3	1	0	0	0
fall	0	1	0	0	0	0	0
get	1	1	1	0	0	0	0
jump	10	21	16	15	21	16	48
move	1	1	0	0	0	0	0
pass	1	0	0	0	0	0	0
run	0	0	1	1	0	0	9
stand	0	0	0	0	0	0	1
stop	0	0	0	0	0	0	1
take	0	0	0	0	0	0	1
walk	0	0	0	0	0	0	3
OTHER VERBS	0	0	2	2	0	0	2
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	0	0	0	1
*** Total ***	25	25	29	26	30	23	68

SENTENCE 4

The policeman had to _____ right under the lorry in order to rescue the injured man.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
bend	5	0	3	0	2	1	0
climb	0	0	0	0	0	0	9
crawl	2	3	3	1	12	9	17
creep	1	0	1	3	3	1	0
dash	0	0	0	0	1	0	0
drag	0	0	0	1	0	0	0
drive	0	0	1	0	0	0	0
enter	1	3	3	0	0	1	0
follow	0	1	0	0	0	0	0
get	3	1	3	2	1	0	11
go	7	2	5	13	1	7	16
jump	0	1	0	0	1	0	2
look	1	1	3	0	0	1	0
move	0	1	0	1	0	0	1
pass	0	1	1	1	1	0	0
reach	0	0	0	0	0	0	1
run	0	0	0	0	0	0	2
rush	0	2	1	0	0	0	0
slide	0	0	0	0	0	0	6
stand	0	2	0	0	0	0	0
stop	0	3	1	0	0	0	0
turn	0	3	0	0	0	0	0
walk	0	0	1	0	0	0	0
OTHER VERBS	5	1	3	4	8	3	2
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	0	0	0	1
*** Total ***	25	25	29	26	30	23	68

SENTENCE 5

Although he wasn't really running, he was certainly

_____.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
catch	0	1	1	1	0	0	0
drag	0	0	2	0	0	0	0
fall	1	2	2	0	0	0	0
go	0	0	0	0	1	0	0
hurry	5	0	1	0	4	0	3
jog	2	0	2	7	5	9	17
jump	1	0	0	0	0	1	0
move	0	2	1	6	1	1	2
run	0	0	1	0	1	0	0
rush	2	0	0	0	0	0	2
stroll	2	0	0	0	0	0	0
walk	3	3	15	4	3	4	5
OTHER VERBS	3	5	2	3	2	4	3
NON-VERBS*	6	11	2	5	13	4	36
NOT ATTEMPTED	0	1	0	0	0	0	0
*** Total ***	25	25	29	26	30	23	68
[*fast (nonvb)	0	2	0	2	5	3	27]

SENTENCE 6.

In the old days it was quite common for people to _____ *from here to* [nearby town] *and back in a day.*

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
come	1	0	0	0	0	0	3
drive	0	0	0	0	0	0	3
foot	1	0	4	1	3	3	0
go	0	3	2	0	2	0	5
jog	0	0	0	0	0	0	1
move	1	1	0	0	0	0	3
travel	7	9	2	8	5	3	12
trek	1	0	0	2	1	1	0
walk	13	12	21	14	18	15	34
OTHER VERBS	1	0	0	0	0	0	5
NON-VERBS	0	0	0	0	0	0	1
NOT ATTEMPTED	0	0	0	0	0	0	1
*** Total ***	25	25	29	26	30	23	68

SENTENCE 7

If you ever _____ this way again, don't forget to visit us.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
come	9	8	13	18	23	17	38
drive	0	0	0	0	0	0	1
follow	3	0	3	2	0	0	0
go	1	1	0	0	0	0	7
leave	0	1	0	0	0	0	0
pass	7	3	3	1	6	2	16
return	0	0	0	0	0	1	0
stroll	0	0	0	1	0	0	0
take	0	1	0	0	0	0	0
travel	0	1	1	1	0	2	0
visit	0	3	0	0	0	1	0
walk	0	0	2	0	0	0	0
OTHER VERBS	5	7	7	3	1	0	3
NON-VERBS	0	0	0	0	0	0	1
NOT ATTEMPTED	0	0	0	0	0	0	1
*** Total ***	25	25	29	26	30	23	68

SENTENCE 8

The boys had to _____ over the railway line in order to get to John's house.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
climb	1	0	0	0	0	0	1
cross	14	18	8	19	20	13	31
get	0	0	0	0	0	0	1
go	0	0	3	2	2	0	8
jump	2	2	8	0	4	7	4
move	0	0	0	1	0	0	0
pass	5	2	5	3	1	1	1
run	0	0	0	0	0	0	11
sneak	0	0	0	0	0	1	0
travel	0	1	2	0	0	0	0
walk	3	1	3	1	2	1	11
OTHER VERBS	0	1	0	0	0	0	0
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	0	1	0	0
*** Total ***	25	25	29	26	30	23	68

SENTENCE 10

The children _____ for more than an hour without seeing any villages.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
go	0	3	0	1	0	0	2
move	0	1	0	1	0	0	0
run	1	0	1	1	2	0	3
stand	0	1	0	0	0	0	0
stay	2	4	3	0	2	2	1
travel	1	1	1	6	9	2	2
trek	1	0	0	0	0	1	0
wait	0	2	2	3	0	2	0
walk	19	12	17	12	15	14	47
OTHER VERBS	1	1	3	2	1	2	4
NON-VERBS	0	0	0	0	0	0	1
NOT ATTEMPTED	0	0	0	0	0	0	1
*** Total ***	25	25	29	26	30	23	68

SENTENCE 11

When the driver called him, the small boy _____ the car fearfully and whispered the name of the place.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
alight	0	0	1	0	0	1	8
approach	7	0	1	9	9	7	0
board	1	0	1	1	1	1	0
climb	0	0	0	1	0	0	0
come	0	2	0	2	1	0	1
cross	0	2	0	0	0	0	0
drive	0	1	2	2	1	1	0
enter	5	2	3	2	0	2	10
follow	1	0	1	0	0	0	4
go	1	4	1	1	0	0	0
jump	0	2	0	0	0	0	0
leave	1	1	1	2	2	2	5
look	0	1	2	0	0	1	1
move	0	0	2	0	0	0	0
pass	0	0	0	0	1	0	1
push	0	0	0	0	0	0	1
reach	0	0	0	0	0	1	5
run	1	3	2	0	2	0	1
rush	0	0	1	0	0	0	0
see	0	3	0	0	2	0	5
stop	2	1	1	2	3	0	2
travel	0	0	0	1	0	0	0
turn	1	0	0	0	1	0	0
walk	0	1	0	0	0	0	0
OTHER VERBS	3	1	9	3	6	7	9
NON-VERBS	1	0	1	0	1	0	2
NOT ATTEMPTED	1	1	0	0	0	0	12
*** Total ***	25	25	29	26	30	23	68

SENTENCE 12

I saw the thief _____ towards the open door while the shopkeeper was busy with a customer.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
climb	1	0	0	0	0	0	0
come	0	0	0	1	1	0	9
creep	0	0	0	0	1	0	1
dash	2	0	0	2	5	3	0
enter	1	2	2	1	1	0	0
escape	0	0	2	1	0	0	0
go	1	6	2	4	4	2	14
hurry	1	0	0	0	0	0	0
leave	0	0	0	1	0	0	0
move	0	2	3	8	3	3	5
pass	0	1	1	1	0	0	0
push	1	0	0	0	0	0	0
run	11	7	6	1	6	10	28
rush	0	0	2	0	2	1	0
sneak	0	0	2	0	0	0	3
stand	1	0	0	0	0	0	0
steal	1	1	1	0	0	0	0
stroll	0	0	0	0	0	0	2
walk	4	6	7	4	2	3	4
OTHER VERBS	1	0	1	1	5	1	1
NON-VERBS	0	0	0	1	0	0	0
NOT ATTEMPTED	0	0	0	0	0	0	1
*** Total ***	25	25	29	26	30	23	68

SENTENCE 13

She told us to _____ the road for a few kilometres until we saw the lake.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
approach	0	0	0	0	0	1	0
cross	2	1	1	0	1	0	0
drive	0	0	0	0	1	0	0
follow	16	18	20	8	14	15	22
go	0	0	1	0	0	0	1
leave	1	0	0	3	0	2	0
look	0	0	2	0	0	0	0
move	0	0	0	1	0	0	0
pass	1	0	0	0	0	0	0
run	0	0	0	0	1	0	1
stroll	0	0	0	1	1	0	0
take	0	0	0	0	0	0	15
travel	1	0	0	0	0	1	0
walk	2	6	3	5	4	1	13
OTHER VERBS	2	0	2	5	3	2	9
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	3	5	1	7
*** Total ***	25	25	29	26	30	23	68

SENTENCE 15

The flooded path forced us to _____ back and go round the longer way to school.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
come	2	0	2	5	0	1	1
dash	0	0	0	1	0	0	0
get	1	0	0	0	0	1	1
go	7	7	11	1	6	2	24
move	0	1	0	1	0	0	3
retreat	0	0	0	1	2	1	1
return	6	9	7	3	3	4	0
run	0	0	0	0	0	0	2
travel	0	0	0	1	0	1	0
turn	8	5	8	7	11	9	15
walk	1	2	1	3	2	4	11
OTHER VERBS	0	1	0	0	0	0	5
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	3	6	0	5
*** Total ***	25	25	29	26	30	23	68

SENTENCE 16

After a hard day's work, the farmer _____ wearily home.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
climb	0	0	0	0	0	1	0
come	0	3	0	2	1	0	2
drive	0	0	0	0	0	0	3
go	5	4	10	8	7	6	16
leave	1	1	0	0	0	0	0
move	1	0	1	1	0	0	0
retreat	0	0	0	0	0	1	0
rest	1	2	1	2	3	0	0
return	2	1	5	0	4	5	0
start	0	0	1	0	0	0	1
stroll	0	0	1	0	1	0	1
trek	0	0	0	0	0	1	0
walk	10	6	7	9	7	9	30
OTHER VERBS	5	8	3	1	2	0	9
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	3	5	0	6
*** Total ***	25	25	29	26	30	23	68

SENTENCE 17

We managed to _____ on the bus just before it left for town.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
alight	0	2	0	0	2	0	0
arrive	1	1	1	0	0	0	0
board	2	5	1	2	5	5	0
catch	2	0	3	4	3	2	3
climb	3	0	1	1	2	6	1
come	1	0	0	0	0	0	0
enter	0	2	0	0	1	0	0
get	10	10	15	10	9	8	51
go	0	2	1	0	0	0	1
jump	1	1	2	3	3	2	6
reach	2	0	1	0	0	0	0
stop	1	0	0	0	0	0	0
travel	0	1	0	0	0	0	0
OTHER VERBS	2	1	4	3	0	0	4
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	3	5	0	2
*** Total ***	25	25	29	26	30	23	68

SENTENCE 19

I _____ the visitor to the bus stop and then came back home.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
accompany	1	0	4	0	1	0	2
drive	0	0	0	0	0	0	1
escape	0	1	0	0	0	0	0
escort	21	17	22	19	21	22	0
find	0	1	1	0	0	0	0
go	0	0	0	0	0	0	1
meet	0	1	0	1	0	0	1
run	0	0	0	0	0	0	1
take	0	3	2	3	2	1	12
walk	0	0	0	0	0	0	28
OTHER VERBS	3	2	0	0	1	0	17
NON-VERBS	0	0	0	0	0	0	0
NOT ATTEMPTED	0	0	0	3	5	0	5
*** Total ***	25	25	29	26	30	23	68

SENTENCE 20

That man isn't running very fast, he's just _____ along.

Verb	DLS	NAS	YRS	DLT	NAT	YRT	MT
come	0	0	0	0	0	0	1
drag	0	0	3	2	2	0	0
go	0	1	0	0	0	0	0
hurry	2	0	0	1	0	0	0
jog	10	1	5	13	9	15	44
move	0	1	2	3	0	0	0
pass	0	0	0	1	0	0	0
stroll	2	1	2	0	4	0	2
walk	7	20	15	2	8	6	8
OTHER VERBS	3	0	2	1	2	2	10
NON-VERBS	1	1	0	0	0	0	0
NOT ATTEMPTED	0	0	0	3	5	0	3
*** Total ***	25	25	29	26	30	23	68

APPENDIX H

TASK B: Statistical Analysis

CHI-SQUARE TESTS ON INDIVIDUAL SENTENCES

Expected counts are printed below observed counts

Sentence 1

ROW 1 = cross
ROW 2 = jump
ROW 3 = OTHER VERBS

(i) S vs T

	S	T	Total
1	40	45	85
	42.50	42.50	
2	17	19	36
	18.00	18.00	
3	22	15	37
	18.50	18.50	
Total	79	79	158

ChiSq = 0.147 + 0.147 +
0.056 + 0.056 +
0.662 + 0.662 = 1.730 n.s.
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	26	37	22	85
	27.44	29.59	27.97	
2	11	6	19	36
	11.62	12.53	11.85	
3	14	12	11	37
	11.94	12.88	12.18	
Total	51	55	52	158

ChiSq = 0.075 + 1.856 + 1.276 +
0.033 + 3.404 + 4.317 +
0.354 + 0.060 + 0.114 = 11.490* p<0.05
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	85	39	124
	86.69	37.31	
2	36	13	49
	34.26	14.74	
3	37	16	53
	37.05	15.95	
Total	158	68	226

ChiSq = 0.033 + 0.077 +
0.089 + 0.206 +
0.000 + 0.000 = 0.405 n.s.
df = 2

Sentence 3

ROW 1 = alight
ROW 2 = jump
ROW 3 = OTHER VERBS

(i) S vs T

	S	T	Total
1	12	22	34
	17.00	17.00	
2	47	52	99
	49.50	49.50	
3	20	5	25
	12.50	12.50	
Total	79	79	158

ChiSq = 1.471 + 1.471 +
0.126 + 0.126 +
4.500 + 4.500 = 12.194** p<0.01
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	15	8	11	34
	10.97	11.84	11.19	
2	25	42	32	99
	31.96	34.46	32.58	
3	11	5	9	25
	8.07	8.70	8.23	
Total	51	55	52	158

ChiSq = 1.476 + 1.243 + 0.003 +
1.514 + 1.649 + 0.010 +
1.064 + 1.575 + 0.072 = 8.608 n.s.
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	34	0	34
	23.77	10.23	
2	99	48	147
	102.77	44.23	
3	25	20	45
	31.46	13.54	
Total	158	68	226

ChiSq = 4.403 + 10.230 +
0.138 + 0.321 +
1.327 + 3.082 = 19.501*** p<0.001
df = 2

Sentence 4

ROW 1 = go, move, get
ROW 2 = OTHER PATH VERBS
ROW 3 = MANNER VERBS
ROW 4 = OTHER VERBS

(i) S vs T

	S	T	Total
1	22	25	47
	23.50	23.50	
2	10	4	14
	7.00	7.00	
3	18	34	52
	26.00	26.00	
4	28	15	43
	21.50	21.50	
Total	78	78	156

ChiSq = 0.096 + 0.096 +
1.286 + 1.286 +
2.462 + 2.462 +
1.965 + 1.965 = 11.616** p<0.01
df = 3

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	26	7	15	48
	15.59	17.12	15.29	
2	2	7	5	14
	4.55	4.99	4.46	
3	8	27	17	52
	16.89	18.55	16.56	
4	15	15	13	43
	13.97	15.34	13.69	
Total	51	56	50	157

ChiSq = 6.947 + 5.983 + 0.005 +
1.427 + 0.806 + 0.066 +
4.681 + 3.852 + 0.012 +
0.076 + 0.007 + 0.035 = 23.897* p<0.001
df = 6
2 cells (16.7%) with expected counts less than 5.0

(iii) KEN vs MT

	KEN	MT	Total
1	47	28	75
	52.47	22.53	
2	14	1	15
	10.49	4.51	
3	52	37	89
	62.26	26.74	
4	43	1	44
	30.78	13.22	
Total	156	67	223

ChiSq = 0.570 + 1.326 +
1.172 + 2.729 +
1.691 + 3.937 +
4.851 + 11.295 = 27.570* p<0.001
df = 3
1 cell (12.5%) with expected count less than 5.0

Sentence 5

ROW 1 = jog
ROW 2 = walk
ROW 3 = OTHER VERBS
ROW 4 = NON-VERBS

(i) S vs T

	S	T	Total
1	4	21	25
	12.42	12.58	
2	21	11	32
	15.90	16.10	
3	34	25	59
	29.31	29.69	
4	19	22	41
	20.37	20.63	
Total	78	79	157

ChiSq = 5.709 + 5.636 +
1.637 + 1.617 +
0.750 + 0.740 +
0.092 + 0.091 = 16.272*** p<0.001
df = 3

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	9	5	11	25
	8.12	8.60	8.28	
2	7	6	19	32
	10.39	11.01	10.60	
3	24	19	16	59
	19.17	20.29	19.54	
4	11	24	6	41
	13.32	14.10	13.58	
Total	51	54	52	157

ChiSq = 0.095 + 1.506 + 0.893 +
1.109 + 2.277 + 6.659 +
1.219 + 0.082 + 0.642 +
0.404 + 6.947 + 4.231 = 26.065*** p<0.001
df = 6

(iii) KEN vs MT

	KEN	MT	Total
1	25	17	42
	29.31	12.69	
2	32	5	37
	25.82	11.18	
3	59	10	69
	48.15	20.85	
4	41	36	77
	53.73	23.27	
Total	157	68	225

ChiSq = 0.633 + 1.461 +
1.480 + 3.418 +
2.447 + 5.649 +
3.016 + 6.962 = 25.066*** p<0.001
df = 3

Sentence 6

ROW 1 = come, go, move, travel
ROW 2 = foot, jog, run, trek, walk
N.B. This excludes 1 DLS other verb and 8 MT other verbs

(i) S vs T

	S	T	Total
1	26	21	47
	23.50	23.50	
2	53	58	111
	55.50	55.50	
Total	79	79	158

ChiSq = 0.266 + 0.266 +
0.113 + 0.113 = 0.757 n.s.
df = 1

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	18	21	8	47
	15.17	16.36	15.47	
2	33	34	44	111
	35.83	38.64	36.53	
Total	51	55	52	158

ChiSq = 0.528 + 1.316 + 3.606 +
0.223 + 0.557 + 1.527 = 7.756* p<0.05
df = 2

(iii) KEN vs MT

	KEN	MT	Total
1	47	20	67
	46.84	20.16	
2	111	48	159
	111.16	47.84	
Total	158	68	226

ChiSq = 0.001 + 0.001 +
0.000 + 0.001 = 0.003 n.s.
df = 1

Sentence 7

ROW 1 = come
ROW 2 = pass
ROW 3 = OTHER VERBS

(i) S vs T

	S	T	Total
1	30	58	88
	44.00	44.00	
2	13	9	22
	11.00	11.00	
3	36	12	48
	24.00	24.00	
Total	79	79	158

ChiSq = 4.455 + 4.455 +
0.364 + 0.364 +
6.000 + 6.000 = 21.636*** p<0.001
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	27	31	30	88
	28.41	30.63	28.96	
2	8	9	5	22
	7.10	7.66	7.24	
3	16	15	17	48
	15.49	16.71	15.80	
Total	51	55	52	158

ChiSq = 0.070 + 0.004 + 0.037 +
0.114 + 0.235 + 0.693 +
0.017 + 0.175 + 0.092 = 1.436 n.s.
df = 4

(iii) KEN vs MT

	K	M	Total
1	88	38	126
	88.87	37.12	
2	22	16	38
	26.80	11.20	
3	48	12	60
	42.32	17.68	
Total	158	66	224

ChiSq = 0.009 + 0.021 +
0.861 + 2.061 +
0.762 + 1.824 = 5.537 n.s.
df = 2

Sentence 8

ROW 1 = cross
ROW 2 = OTHER PATH VERBS
ROW 3 = MANNER VERBS

(i) S vs T

	S	T	Total
1	40	52	92
	46.00	46.00	
2	18	10	28
	14.00	14.00	
3	20	16	36
	18.00	18.00	
Total	78	78	156

ChiSq = 0.783 + 0.783 +
1.143 + 1.143 +
0.222 + 0.222 = 4.295 n.s.
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	33	38	21	92
	30.08	31.26	30.67	
2	11	6	11	28
	9.15	9.51	9.33	
3	7	9	20	36
	11.77	12.23	12.00	
Total	51	53	52	156

ChiSq = 0.284 + 1.455 + 3.047 +
0.372 + 1.297 + 0.298 +
1.933 + 0.853 + 5.333 = 14.873** p<0.01
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	92	31	123
	85.66	37.34	
2	28	10	38
	26.46	11.54	
3	36	27	63
	43.87	19.12	
Total	156	68	224

ChiSq = 0.469 + 1.076 +
0.089 + 0.204 +
1.413 + 3.243 = 6.495* p<0.05
df = 2

Sentence 10

ROW 1 = PATH VERBS
ROW 2 = MANNER VERBS
ROW 3 = OTHER VERBS

(i) S vs T

	S	T	Total
1	7	19	26
	13.00	13.00	
2	51	45	96
	48.00	48.00	
3	21	15	36
	18.00	18.00	
Total	79	79	158

ChiSq = 2.769 + 2.769 +
0.187 + 0.187 +
0.500 + 0.500 = 6.913* p<0.05
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	8	15	3	26
	8.39	9.05	8.56	
2	34	29	33	96
	30.99	33.42	31.59	
3	9	11	16	36
	11.62	12.53	11.85	
Total	51	55	52	158

ChiSq = 0.018 + 3.911 + 3.609 +
0.293 + 0.584 + 0.062 +
0.591 + 0.187 + 1.455 = 10.710* p<0.05
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	26	9	35
	24.69	10.31	
2	96	50	146
	102.98	43.02	
3	36	7	43
	30.33	12.67	
Total	158	66	224

ChiSq = 0.070 + 0.167 +
0.473 + 1.133 +
1.060 + 2.537 = 5.440 n.s.
df = 2

Sentence 12

ROW 1 = come/go
ROW 2 = OTHER PATH VERBS
ROW 3 = MANNER VERBS

(i) S vs T

	S	T	Total
1	9	12	21
	10.79	10.21	
2	15	19	34
	17.47	16.53	
3	51	40	91
	46.75	44.25	
Total	75	71	146

ChiSq = 0.296 + 0.313 +
0.348 + 0.368 +
0.387 + 0.409 = 2.121 n.s.
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	6	11	4	21
	6.62	7.19	7.19	
2	14	9	11	34
	10.71	11.64	11.64	
3	26	30	35	91
	28.67	31.16	31.16	
Total	46	50	50	146

ChiSq = 0.057 + 2.017 + 1.417 +
1.009 + 0.600 + 0.036 +
0.249 + 0.044 + 0.472 = 5.900 n.s.
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	21	23	44
	30.16	13.84	
2	34	5	39
	26.73	12.27	
3	91	39	130
	89.11	40.89	
Total	146	67	213

ChiSq = 2.782 + 6.062 +
1.976 + 4.305 +
0.040 + 0.088 = 15.253*** p<0.001
df = 2

Sentence 13

ROW 1 = follow
ROW 2 = walk
ROW 3 = OTHER VERBS

(i) S vs T

	S	T	Total
1	54	37	91
	47.30	43.70	
2	11	10	21
	10.91	10.09	
3	14	26	40
	20.79	19.21	
Total	79	73	152

ChiSq = 0.950 + 1.028 +
0.001 + 0.001 +
2.217 + 2.400 = 6.597* p<0.05
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	24	32	35	91
	30.53	29.93	30.53	
2	7	10	4	21
	7.05	6.91	7.05	
3	20	8	12	40
	13.42	13.16	13.42	
Total	51	50	51	152

ChiSq = 1.398 + 0.143 + 0.654 +
0.000 + 1.384 + 1.317 +
3.225 + 2.022 + 0.150 = 10.292* p<0.05
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	91	22	113
	80.64	32.36	
2	21	13	34
	24.26	9.74	
3	40	26	66
	47.10	18.90	
Total	152	61	213

ChiSq = 1.331 + 3.318 +
0.439 + 1.093 +
1.070 + 2.666 = 9.917** p<0.01
df = 2

Sentence 15

ROW 1 = go
ROW 2 = (re)turn
ROW 3 = OTHER PATH VERBS
ROW 4 = MANNER VERBS

(i) S vs T

	S	T	Total
1	25	9	34
	18.03	15.97	
2	43	37	80
	42.42	37.58	
3	7	14	21
	11.13	9.87	
4	4	10	14
	7.42	6.58	
Total	79	70	149

ChiSq = 2.697 + 3.044 +
0.008 + 0.009 +
1.535 + 1.732 +
1.578 + 1.781 = 12.386** p<0.01
df = 3

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	8	13	13	34
	10.95	11.18	11.87	
2	24	28	28	80
	25.77	26.31	27.92	
3	11	4	6	21
	6.77	6.91	7.33	
4	5	4	5	14
	4.51	4.60	4.89	
Total	48	49	52	149

ChiSq = 0.796 + 0.296 + 0.108 +
0.122 + 0.109 + 0.000 +
2.651 + 1.223 + 0.241 +
0.053 + 0.079 + 0.003 = 5.681 n.s.
df = 6
3 cells (25%) with expected counts less than 5.0

(iii) KEN vs MT

	KEN	MT	Total
1	34	24	58
	40.76	17.24	
2	80	15	95
	66.77	28.23	
3	21	10	31
	21.79	9.21	
4	14	14	28
	19.68	8.32	
Total	149	63	212

ChiSq = 1.122 + 2.655 +
2.622 + 6.201 +
0.028 + 0.067 +
1.639 + 3.876 = 18.211*** p<0.001
df = 3

Sentence 16

ROW 1 = PATH VERBS
ROW 2 = MANNER VERBS
ROW 3 = OTHER VERBS

(i) S vs T

	S	T	Total
1	34	36	70
	36.87	33.13	
2	26	29	55
	28.97	26.03	
3	19	6	25
	13.17	11.83	
Total	79	71	150

ChiSq = 0.223 + 0.248 +
0.304 + 0.338 +
2.584 + 2.876 = 6.573* p<0.05
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	20	22	28	70
	22.40	23.33	24.27	
2	21	15	19	55
	17.60	18.33	19.07	
3	7	13	5	25
	8.00	8.33	8.67	
Total	48	50	52	150

ChiSq = 0.257 + 0.076 + 0.574 +
0.657 + 0.606 + 0.000 +
0.125 + 2.613 + 1.551 = 6.460 n.s.
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	70	18	88
	62.26	25.74	
2	55	39	94
	66.51	27.49	
3	25	5	30
	21.23	8.77	
Total	150	62	212

ChiSq = 0.961 + 2.325 +
1.992 + 4.819 +
0.671 + 1.623 = 12.391** p<0.01
df = 2

Sentence 17

ROW 1 = get
ROW 2 = MANNER VERBS
ROW 3 = OTHER VERBS

(i) S vs T

	C1	C2	Total
1	35	27	62
	32.65	29.35	
2	10	17	27
	14.22	12.78	
3	34	27	61
	32.13	28.87	
Total	79	71	150

ChiSq = 0.169 + 0.188 +
1.252 + 1.393 +
0.109 + 0.122 = 3.233 n.s.
df = 2

(ii) DL vs NA vs YR

	C3	C4	C5	Total
1	20	19	23	62
	19.84	20.67	21.49	
2	9	6	12	27
	8.64	9.00	9.36	
3	19	25	17	61
	19.52	20.33	21.15	
Total	48	50	52	150

ChiSq = 0.001 + 0.134 + 0.106 +
0.015 + 1.000 + 0.745 +
0.014 + 1.071 + 0.813 = 3.899 n.s.
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	62	51	113
	78.47	34.53	
2	27	10	37
	25.69	11.31	
3	61	5	66
	45.83	20.17	
Total	150	66	216

ChiSq = 3.458 + 7.858 +
0.066 + 0.151 +
5.019 + 11.406 = 27.958
df = 2

Sentence 19

ROW 1 = PATH VERBS
ROW 2 = ALL OTHER VERBS

(i) S vs T

	S	T	Total
1	68	63	131
	68.99	62.01	
2	11	8	19
	10.01	8.99	
Total	79	71	150

ChiSq = 0.014 + 0.016 +
0.099 + 0.110 = 0.239 n.s.
df = 1

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	41	41	49	131
	39.80	41.46	49.75	
2	7	9	11	27
	8.20	8.54	10.25	
Total	48	50	60	158

ChiSq = 0.036 + 0.005 + 0.011 +
0.176 + 0.024 + 0.054 = 0.308 n.s.
df = 2

(iii) KEN vs MT

	KEN	MT	Total
1	131	2	133
	93.66	39.34	
2	19	61	80
	56.34	23.66	
Total	150	63	213

ChiSq = 14.885 + 35.440 +
24.746 + 58.919 = 133.989
df = 1

Sentence 20

ROW 1 = jog
ROW 2 = walk
ROW 3 = OTHER VERBS

(i) S vs T

	S	T	Total
1	16	37	53
	27.57	25.43	
2	42	16	58
	30.18	27.82	
3	19	18	37
	19.25	17.75	
Total	77	71	148

ChiSq = 4.858 + 5.269 +
4.633 + 5.025 +
0.003 + 0.004 = 19.792*** p<0.001
df = 2

(ii) DL vs NA vs YR

	DL	NA	YR	Total
1	23	10	20	53
	16.83	17.55	18.62	
2	9	28	21	58
	18.42	19.20	20.38	
3	15	11	11	37
	11.75	12.25	13.00	
Total	47	49	52	148

ChiSq = 2.261 + 3.246 + 0.102 +
4.817 + 4.030 + 0.019 +
0.899 + 0.128 + 0.308 = 15.809** p<0.01
df = 4

(iii) KEN vs MT

	KEN	MT	Total
1	53	44	97
	67.40	29.60	
2	58	8	66
	45.86	20.14	
3	37	13	50
	34.74	15.26	
Total	148	65	213

ChiSq = 3.076 + 7.004 +
3.214 + 7.318 +
0.147 + 0.334 = 21.094*** p<0.001
df = 2

Table 1 Two-way ANOVA on Task B Manner verb percentages

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	1780.50	3	593.50	4.41	.005
LANG	1464.23	2	732.12	5.44	.005
EDUC	424.27	1	424.27	3.15	.078
2-Way Interactions	1299.12	2	649.56	4.82	.009
LANG*EDUC	1299.12	2	649.56	4.82	.009
Explained	3079.61	5	615.92	4.57	.001
Residual	20466.82	152	134.65		
Total	23546.43	157	149.98		

APPENDIX J

TASK C: Statistical analysis

ACCEPTABILITY PERCENTAGES

item	DL	NA	YR	KEN	MT	MT-X
1	88.0	78.6	57.1	75.7	93.8	98.5
2	72.0	67.9	57.1	66.2	56.3	82.7
3	36.0	17.9	33.3	28.4	6.3	19.2
4	24.0	17.9	23.8	21.6	33.3	27.7
5	52.0	67.9	76.2	64.9	72.9	71.5
6	36.0	25.0	38.1	32.4	64.6	80.0
7	80.0	53.6	52.4	62.2	37.5	41.2
8	28.0	32.1	33.3	31.1	41.7	34.2
9	12.0	0.0	19.0	9.5	4.2	11.9
10	72.0	60.7	95.2	74.3	91.7	88.1
11	68.0	82.1	76.2	75.7	79.2	91.2
12	92.0	75.0	76.2	81.1	58.3	75.8
13	96.0	96.4	95.2	95.9	91.7	93.5
14	48.0	35.7	71.4	50.0	8.3	21.9
15	52.0	89.3	81.0	74.3	22.9	68.1
16	84.0	89.3	90.5	87.8	83.3	88.8
17	76.0	85.7	66.7	77.0	87.5	83.8
18	36.0	28.6	52.4	37.8	77.1	67.7
19	56.0	35.7	57.1	48.6	20.8	42.7
20	4.0	7.1	4.8	5.4	6.3	20.0
21	40.0	39.3	66.7	47.3	43.8	40.8
22	87.5	85.7	95.2	89.0	89.6	93.1
23	52.0	46.4	61.9	52.7	83.3	87.7
24	64.0	57.1	47.6	56.8	6.3	16.9
25	52.0	39.3	71.4	52.7	27.1	43.8
26	52.0	67.9	47.6	56.8	47.9	69.2
27	60.0	71.4	52.4	62.2	75.0	75.4
28	40.0	60.7	52.4	51.4	58.3	64.6
29	88.0	85.7	71.4	82.4	56.3	71.2
30	4.0	3.6	4.8	4.1	4.2	14.2
(N)	(25)	(28)	(21)	(74)	(48)	(65)

ONE-WAY ANOVA ON ALL ITEMS

```
ANALYSIS OF VARIANCE
SOURCE      DF        SS        MS         F        p
FACTOR       3       696       232      0.30    0.822
ERROR      116     88507       763
TOTAL      119     89202

                                      INDIVIDUAL 95 PCT CI'S FOR MEAN
                                      BASED ON POOLED STDEV
LEVEL       N      MEAN     STDEV  ---------+---------+---------+-------
DL         30     54.93     25.73       (-----------*-----------)
NA         30     53.45     28.47     (-----------*-----------)
YR         30     57.62     24.74           (-----------*-----------)
MT         30     50.97     31.10   (-----------*-----------)
                                     ---------+---------+---------+-------
POOLED STDEV =    27.62                     48.0      56.0      64.0
```

ONE-WAY ANOVA ON ITEMS WHERE NO DIFFERENCE PREDICTED (Categories I & IV)

```
ANALYSIS OF VARIANCE
SOURCE      DF        SS        MS         F        p
FACTOR       3        11         4      0.00    1.000
ERROR       48     59983      1250
TOTAL       51     59994

                                      INDIVIDUAL 95 PCT CI'S FOR MEAN
                                      BASED ON POOLED STDEV
LEVEL       N      MEAN     STDEV  ----+---------+---------+---------+--
D1/4       13     51.69     34.12    (---------------*---------------)
N1/4       13     51.92     36.59    (---------------*---------------)
Y1/4       13     52.38     32.88    (---------------*---------------)
M1/4       13     51.12     37.62  (---------------*---------------)
                                     ----+---------+---------+---------+--
POOLED STDEV =    35.35               36        48        60        72
```

ONE-WAY ANOVA ON ITEMS PREDICTED NOT ACCEPTABLE TO SOME NNS (Category II)

```
ANALYSIS OF VARIANCE
SOURCE      DF        SS        MS         F        p
FACTOR       3       180        60      0.15    0.927
ERROR       32     12579       393
TOTAL       35     12759

                                      INDIVIDUAL 95 PCT CI'S FOR MEAN
                                      BASED ON POOLED STDEV
LEVEL       N      MEAN     STDEV  ------+---------+---------+---------+
D2          9     57.78     17.22  (-------------*------------)
N2          9     60.32     22.83     (------------*-------------)
Y2          9     61.90     17.82      (-------------*------------)
M2          9     63.89     20.91        (-------------*------------)
                                     ------+---------+---------+---------+
POOLED STDEV =    19.83              50        60        70        80
```

ONE-WAY ANOVA ON ITEMS PREDICTED ACCEPTABLE TO SOME NNS (Category III)

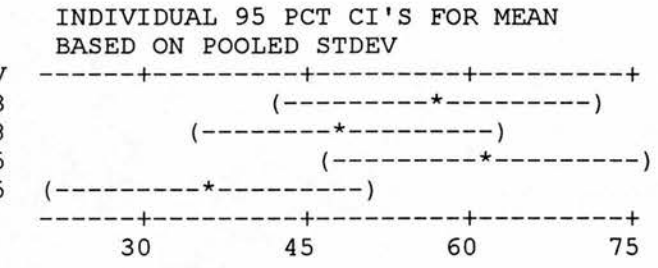
ANALYSIS OF VARIANCE

SOURCE	DF	SS	MS	F	p
FACTOR	3	2950	983	2.47	0.083
ERROR	28	11148	398		
TOTAL	31	14097			

LEVEL	N	MEAN	STDEV
D3	8	57.00	19.33
N3	8	48.21	19.28
Y3	8	61.31	15.15
M3	8	36.20	24.85

POOLED STDEV = 19.95

INDIVIDUAL 95 PCT CI'S FOR MEAN BASED ON POOLED STDEV



CHI-SQUARE TESTS ON SELECTED SENTENCES

Expected counts are printed below observed counts

Sentence 6

	DL6	NA6	YR6	MT6	Total
1	9	7	8	31	55
	11.27	12.62	9.47	21.64	
2	16	21	13	17	67
	13.73	15.38	11.53	26.36	
Total	25	28	21	48	122

ChiSq = 0.457 + 2.505 + 0.227 + 4.049 +
0.375 + 2.056 + 0.187 + 3.324 = 13.181
df = 3 p<0.005

Sentence 7

	DL7	NA7	YR7	MT7	Total
1	20	15	11	18	64
	13.11	14.69	11.02	25.18	
2	5	13	10	30	58
	11.89	13.31	9.98	22.82	
Total	25	28	21	48	122

ChiSq = 3.615 + 0.007 + 0.000 + 2.048 +
3.989 + 0.007 + 0.000 + 2.259 = 11.924
df = 3 p<0.01

Sentence 12

	DL12	NA12	YR12	MT12	Total
1	23	21	16	28	88
	18.03	20.20	15.15	34.62	
2	2	7	5	20	34
	6.97	7.80	5.85	13.38	
Total	25	28	21	48	122

ChiSq = 1.368 + 0.032 + 0.048 + 1.267 +
3.541 + 0.083 + 0.124 + 3.279 = 9.742
df = 3 p<0.025

Sentence 14

	DL14	NA14	YR14	MT14	Total
1	12	10	15	4	41
	8.40	9.41	7.06	16.13	
2	13	18	6	44	81
	16.60	18.59	13.94	31.87	
Total	25	28	21	48	122

ChiSq = 1.541 + 0.037 + 8.939 + 9.123 +
0.780 + 0.019 + 4.525 + 4.618 = 29.581
df = 3 p<0.001

	DL14	NA14	YR14	Total
1	12	10	15	37
	12.50	14.00	10.50	
2	13	18	6	37
	12.50	14.00	10.50	
Total	25	28	21	74

ChiSq = 0.020 + 1.143 + 1.929 +
0.020 + 1.143 + 1.929 = 6.183
df = 2 p<0.05

Sentence 15

	DL15	NA15	YR15	MT15	Total
1	13	25	17	11	66
	13.52	15.15	11.36	25.97	
2	12	3	4	37	56
	11.48	12.85	9.64	22.03	
Total	25	28	21	48	122

ChiSq = 0.020 + 6.408 + 2.799 + 8.627 +
0.024 + 7.553 + 3.299 + 10.167 = 38.898
df = 3 p<0.001

Sentence 15 (contd)

	DL15	NA15	YR15	Total
1	13	25	17	55
	18.58	20.81	15.61	
2	12	3	4	19
	6.42	7.19	5.39	
Total	25	28	21	74

ChiSq = 1.676 + 0.843 + 0.124 +
4.853 + 2.441 + 0.359 = 10.297
df = 2 p<0.025

Sentence 18

	DL18	NA18	YR18	MT18	Total
1	9	8	11	37	65
	13.32	14.92	11.19	25.57	
2	16	20	10	11	57
	11.68	13.08	9.81	22.43	
Total	25	28	21	48	122

ChiSq = 1.401 + 3.208 + 0.003 + 5.105 +
1.598 + 3.658 + 0.004 + 5.822 = 20.799
df = 3 p<0.001

Sentence 19

	DL19	NA19	YR19	MT19	Total
1	14	10	12	10	46
	9.43	10.56	7.92	18.10	
2	11	18	9	38	76
	15.57	17.44	13.08	29.90	
Total	25	28	21	48	122

ChiSq = 2.219 + 0.029 + 2.104 + 3.624 +
1.343 + 0.018 + 1.274 + 2.193 = 12.805
df = 3 p<0.01

Sentence 23

	DL23	NA23	YR23	MT23	Total
1	13	13	13	40	79
	16.19	18.13	13.60	31.08	
2	12	15	8	8	43
	8.81	9.87	7.40	16.92	
Total	25	28	21	48	122

ChiSq = 0.628 + 1.452 + 0.026 + 2.559 +
1.154 + 2.668 + 0.048 + 4.701 = 13.236
df = 3 p<0.005

Sentence 24

	DL24	NA24	YR24	MT24	Total
1	16	16	10	3	45
	9.22	10.33	7.75	17.70	
2	9	12	11	45	77
	15.78	17.67	13.25	30.30	
Total	25	28	21	48	122

ChiSq = 4.983 + 3.115 + 0.656 + 12.213 +
2.912 + 1.821 + 0.383 + 7.138 = 33.221
df = 3 p<0.001

Sentence 25

	DL25	NA25	YR25	MT25	Total
1	13	11	15	13	52
	10.66	11.93	8.95	20.46	
2	12	17	6	35	70
	14.34	16.07	12.05	27.54	
Total	25	28	21	48	122

ChiSq = 0.516 + 0.073 + 4.088 + 2.719 +
0.383 + 0.054 + 3.037 + 2.020 = 12.891
df = 3 p<0.005

Sentence 27

	DL27	NA27	YR27	MT27	Total
1	15	20	11	36	82
	16.80	18.82	14.11	32.26	
2	10	8	10	12	40
	8.20	9.18	6.89	15.74	
Total	25	28	21	48	122

ChiSq = 0.194 + 0.074 + 0.687 + 0.433 +
0.397 + 0.152 + 1.409 + 0.888 = 4.233
df = 3 p<0.25

Sentence 28

	DL28	NA28	YR28	MT28	Total
1	10	17	11	23	61
	13.03	14.60	10.95	22.42	
2	15	11	10	20	56
	11.97	13.40	10.05	20.58	
Total	25	28	21	43	117

ChiSq = 0.706 + 0.395 + 0.000 + 0.015 +
0.769 + 0.430 + 0.000 + 0.016 = 2.333
df = 3 p<0.5

APPENDIX K

TASK D: SIMILARITY MATRICES

SIMILARITY MATRIX FOR LUO SPEAKERS (N = 32)

A advanced																			
10	B came																		
0	1	C crept																	
3	0	0	D dashed																
2	0	2	12	E escaped															
4	1	0	17	7	F hurried														
1	0	5	5	1	8	G jogged													
0	0	11	0	0	0	5	H limped												
6	2	1	2	3	3	3	2	J marched											
6	1	0	2	4	2	1	1	6	K moved										
5	3	1	2	7	3	0	0	3	11	L passed									
2	1	2	7	7	9	17	1	7	3	2	M ran								
6	19	1	0	1	1	0	0	1	0	3	1	N returned							
0	0	9	1	0	0	5	19	3	1	0	1	0	P staggered						
4	1	3	2	0	1	2	3	8	6	4	2	1	3	R strolled					
6	3	0	2	1	3	1	0	4	14	8	1	2	0	2	S travelled				
2	1	13	2	1	3	4	9	3	2	1	3	1	6	7	0	T tiptoed			
4	5	1	0	0	3	2	2	14	8	4	3	2	3	14	8	4	U walked		
0	1	4	4	1	1	2	4	4	2	2	0	2	12	9	3	2	3	V wandered	
10	7	0	3	3	3	1	0	4	12	11	3	7	0	5	10	1	6	1	W went

SIMILARITY MATRIX FOR NANDI SPEAKERS (N = 35)

A advanced																			
17	B came																		
2	2	C crept																	
1	0	1	D dashed																
2	1	7	11	E escaped															
2	0	0	25	12	F hurried														
3	1	2	7	4	8	G jogged													
1	2	12	2	2	0	9	H limped												
7	6	0	2	1	2	3	1	J marched											
8	5	0	1	1	1	2	1	16	K moved										
6	7	1	4	3	2	2	2	9	14	L passed									
2	0	1	22	6	27	7	1	3	0	0	M ran								
10	22	2	1	2	1	0	1	3	5	8	0	N returned							
0	1	5	0	1	0	4	14	2	2	1	0	1	P staggered						
4	3	0	0	0	0	6	2	9	8	4	1	1	10	R strolled					
6	6	0	3	2	1	1	0	16	16	15	2	3	1	7	S travelled				
0	0	23	1	7	0	8	13	0	0	0	1	1	5	1	0	T tiptoed			
6	4	0	1	0	2	2	1	17	18	8	4	3	2	13	20	0	U walked		
1	1	2	0	2	0	5	6	2	3	2	0	1	17	19	1	5	3	V wandered	
7	8	0	1	2	1	1	1	13	14	13	3	5	2	7	22	0	22	2	W went

SIMILARITY MATRIX FOR LUNYORE SPEAKERS (N = 26)

```
 A advanced
11   B came
 1   0   C crept
 5   0   1   D dashed
 3   0   9   7   E escaped
 2   0   1  12   2   F hurried
 2   0   2   5   1   6   G jogged
 2   0   8   0   0   0   4   H limped
 2   4   0   0   0   3   3   0   J marched
 5   5   0   0   1   1   0   0   7   K moved
 3   6   0   2   2   0   0   0   8  12   L passed
 1   1   0  14   0  16   9   0   3   0   1   M ran
 3   9   0   0   0   0   0   0   0   1   1   0   N returned
 0   0   8   1   1   1   3  14   0   0   0   0   0   P staggered
 1   4   0   0   0   0   1   1   6   8   4   0   0   1   R strolled
 3   5   0   0   0   0   1   0   4   7   9   0   4   0   9   S travelled
 1   0  12   2   5   2   8   8   1   0   0   2   1   4   2   0   T tiptoed
 3   7   0   0   0   1   1   0  10  12   9   0   1   0  10  11   1   U walked
 0   0   5   0   0   1   3   4   1   2   1   0   2  11   7   1   2   1   V wandered
 6   6   0   0   1   0   1   0   5  10   9   0   3   0   6  12   0  15   2   W went
```

SIMILARITY MATRIX FOR NATIVE SPEAKERS (N = 31)

```
 A advanced
 5   B came
 0   1   C crept
 3   0   0   D dashed
 7   1   0   9   E escaped
 5   0   0  23  10   F hurried
 3   2   1  16   7  15   G jogged
 2   0   8   1   1   1   2   H limped
 8   4   2   5   4   4   7   1   J marched
 9  10   1   3   3   2   4   2   5   K moved
11   9   1   2   3   2   3   3   4  11   L passed
 4   0   0  25   8  25  16   0   3   2   1   M ran
 6   8   0   2  10   2   1   1   1   2   2   1   N returned
 1   2   6   1   1   1   2  26   2   3   2   0   2   P staggered
 5   6   7   2   1   2   4   6   7   8   7   1   3   8   R strolled
13   4   1   5   6   5   5   1  10   9   8   4   5   1   9   S travelled
 1   3  23   1   1   1   2   8   2   4   1   0   2   9  10   1   T tiptoed
 8  10   3   1   1   1   3   2   8  15  13   0   2   4  18  10   5   U walked
 3   3   4   1   3   1   2   5   7   6   4   0   3   6  15   9   5   9   V wandered
 7  20   3   0   2   0   2   1   4  15  13   0   3   1   5   7   3  10   4   W went
```

APPENDIX L

EXAMPLES OF LOCOMOTION VERB USAGE FROM THE COBUILD DICTIONARY

PATH VERBS

ACCOMPANY
She asked me to accompany her to the church

ADVANCE
She advanced on him, shouting and waving her umbrella threateningly

ALIGHT
Nobody met me at the station where I alighted
She greeted the first arrivals, as they alighted from their machines

APPROACH
He opened the car door for her as she approached
Someone was approaching the village

ARRIVE
He arrived back at his hotel soon after midnight

ASCEND
He ascended the flight of narrow stairs to his bedroom

BOARD
Flo and I decided to board a train for Geneva
We joined the passengers waiting to board

CHASE
Youngsters chase one another up trees and play tag
As a child, I loved to chase the chickens barefoot round the yard
I couldn't chase after them as they were running too fast

CIRCLE
The pilot circled and come down very fast

COME
She looked up when they came into the room
I will come to see you on my way home
The children came along the beach towards me

CROSS
He crossed the room slowly

I wanted to prove a woman could cross the desert
He stood up and crossed to the door

DEPART
They watched the visitor depart as quietly as he had come
A number of us departed for an afternoon outing

DESCEND
They descended the stairs

DISEMBARK
Half the passengers disembarked at Cherbourg

EMBARK
She had embarked on S.S. Gordon Castle at Tilbury

ENTER
They stopped talking as soon as they saw Brody enter

ESCAPE
Many crossed the border to escape the carnage in their homeland
In 1966 the master spy George Blake escaped from prison
Even if he managed to escape, where would he run?

ESCORT
He escorted me to the door
The vicar escorted her back to the drawing room

FALL
If he tried to move, he would fall off the stool
She lost her balance and would have fallen if she hadn't supported herself

FLEE
Local tribesmen fled in fear

FOLLOW
He followed Sally into the yard
Come on! Follow me!
Lynn got up and made for the stairs. Marsha followed.

GET
When we got to Firle Beacon we had a bit of a rest
Frankie and Clive were trying to get through a window
Nobody can get past
We got along the street as we best we could
They had a terrible job getting down the gangplank

GO
She went into the sitting room
He went to get some fresh milk
'I must go,' she said

He went down another street
She's going for a swim

JOURNEY
He landed on the west coast and journeyed over rough roads

LEAVE
They left the house to go for a walk after tea
He stood up to leave
I left Conrad and joined the Count at his table

MIGRATE
Millions have migrated to the cities because they could not survive in rural areas

MOUNT
Walter mounted the steps and pressed the bell
She mounted the last flight to the sixth floor
I mounted the podium to stare into 10,000 faces

MOVE
He moved around, pulling books off shelves
Can you move down the bus, please?

PASS
We passed the New Hotel
I had to pass this way to reach my car
They passed through an arched gateway

PRECEDE
She slung the bag across her shoulder and preceded him across the vast hallway
We were preceded by a huge man called Teddy Brown

PURSUE
Weasels pursue rats and mice as well as birds

REACH
It was dark by the time I reached their house

RETREAT
Betsy and I retreated to the edge of the field
I nearly tripped and fell as I retreated from the gentleman who rushed up to me

RETURN
I returned to my hotel
He returned home several hours later

RISE
Dr Willoughby rose to greet him

She rose from her knees
Poirot had risen to his feet

SCALE
She scaled the barrier like a Commando
We had to penetrate dense scrub and scale rocks

SET
We set off on another four-hour trek through the swamps
Dan set off down the mountain to find help
We set out along the beach
Mr Dekker and his son set out to walk to Whitelake River

START
Ralph started back to the shelters
They started across the hotel's cobbled forecourt
They started down the street together
Before we could stop him, he had started off across the desert
They started out to church

TOUR
He spent his vacation touring the highlands of Scotland

TRAIL
Everyone else came trailing behind, singing and applauding
I used to trail round after him like a small child

TRAVEL
He has travelled widely
I travelled sixty miles to buy those books

TRAVERSE
...a territory that a man on horseback could traverse in a single day

TURN
She turned and walked away
He turns down a side street

MANNER VERBS

AMBLE
I just ambled home through the village
'Why, sure,' he said, ambling off down the path

BOLT
He bolted blindly towards his father's fallen goat

CHARGE
A car door slammed, and Len Hendricks charged into the station house
She charged off to the bedroom

CLAMBER
We clambered up the hill
She came clambering over the pile of old junk

CLIMB
We started to climb the hill
He climbed the stairs to his bedroom
I climbed up the ladder
We climbed over the gate and sat down behind the hedge

CRAWL
I doubled up my large body in order to crawl in
The baby is crawling about and upsetting things
The cameraman crawls under people's feet

CREEP
I heard my landlady creeping stealthily up to my door
They watched the boy hunch down and creep towards the bush

DART
She darted forward and kissed Mary on the cheek

DASH
People dashed out into the street to see what was happening
I spent all day dashing around trying to do my Christmas shopping

FILE
They filed out in silence

HIKE
I've been hiking round Scotland for a month

HOBBLE
He hobbled along as best he could

HOP
...hopping clumsily up and down in their chains

HURRY
He hurried off down the street
The people hurried home

JOG
He jogged out to see what was happening

JUMP
He jumped down from the terrace

LEAP
They took off their clothes and leaped into the water
We had to leap across the road to the car

LIMP
He picked up his bag and limped back to the road

LOITER
Remember not to loiter on the way

LUNGE
He lunged toward me

LURCH
He lurched and fell

MARCH
They marched through Norway
Nobody can march 30 miles a day
She turned and marched back into the kitchen

PACE
She paced the room angrily
She began to pace round the office
Harold paced nervously up and down the platform

PARADE
Young men paraded up and down the street in striped blazers
He paraded in front of the mirror in his new uniform

PUSH
Ralph pushed between them to get a better view
The men pushed past them towards the bar
I pushed my way through the people

RACE
He turned and raced after the others

RAMBLE
I was rambling over the hills of Yorkshire
She rambled out of the room without saying anything

ROAM
They roam over the hills and plains [?animals]
He roamed the streets at night
They enjoyed the freedom to roam

ROVE
No longer could they rove at will
...the thugs who rove the streets at night

RUN
I ran downstairs to open the door
He jumped to the ground and ran
He went running to meet them

RUSH
Please don't rush off
I'm late, I have to rush

SAUNTER
All afternoon he sauntered up and down, looking at the shops and the people
A policeman sauntered over from across the road to find out what the crowd was doing

SCAMPER
I saw him scamper away

SCRAMBLE
They scrambled away over the rocks and fled
John scrambled up the bank

SCURRY
Everyone scurried for cover when the police started firing

SCUTTLE
Ted scuttled after his brother

SHUFFLE
He slipped on his shoes and shuffled out of the room
...a fat woman shuffling along with a pushchair

SIDLE
She stammered some apology as she sidled towards the door
A man sidled up to me and asked me if I wanted a ticket for the match

SKIP
They ran back to the house, skipping over the grass and singing all the way
He skipped around the room

SLIDE
I had seen him sliding quietly out of his caravan

SLINK
I slunk away to my room, to brood in front of the fire
I thought you'd come slinking back

SLIP
I slipped on the snow and sprained my ankle
I hope we can slip away before she notices

SLITHER
We slithered down the steep slope to Itford Farm
There was no sound except our feet slithering among the roots

SNEAK
That night I sneaked out of the dormitory and crept down the drive
I didn't notice Bob sneaking up behind me

SQUEEZE
We squeezed under the wire and into the garden

STAGGER
I staggered to the nearest chair
We managed to stagger back up to the deck

STAMP
We reluctantly stamped into the principal's office
I set my face into stiff grimaces as I stamped along

STEP
Step over the wire
Tom stepped back
She stepped into the corridor
The captain stepped close to my side

STRAY
I'll make sure that he doesn't stray off on his own
Children had strayed on to an airport runway

STRIDE
Louisa watched him striding across the lawn towards his bonfire
He had turned and was striding out of the entrance
The river was so narrow that he could easily stride over it

STROLL
They strolled along the beach

STRUT
Eddie turned and strutted back to them
This honour entitled her to strut in front of the marching band at football games

STUMP
My cousin stumped around in the mud
She stumped back into the house

TIPTOE
He knocked softly on the door and tiptoed into his room

TODDLE
You could see his grandson toddling around in the garden

TOTTER
Thelma tottered from the stage in search of the gin bottle

TRAMP

She tramped slowly up the beach to where Amy was sitting
We tramped through the wood
...a postman tramping the streets

TREAD

Rose trod with care
She trod heavily out of the room and into the courtyard

TREK

I used to see the workers trekking every morning to the steel mills
They trekked for three days along the banks of the Zambezi

TRUDGE

There was a stream of refugees trudging up the valley towards the border
He trudged wearily along the path

WADE

The children waded out into the lake
We saw one of them trying to wade across a creek

WALK

I shan't take the bus, I'm going to walk
We walked along in silence for a bit
Just open the door and walk in
'Hello,' she said, walking up to Brody
They used to walk 10 miles to school a day
Walk three steps to the left
We saw barefoot doctors walking country roads

WANDER

We wandered round the little harbour town
A man was found wandering in the hills near Eskdale
He lost interest in the book and wandered off
The children wandered the streets after school

WRIGGLE

We had to wriggle under the fence

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